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OF THE

MEDICAL PROFESSION.

EDITED BY

N. S. DAVIS, M.D.,

PROFESSOR OF PRINCIPLES AND PRACTICE OF MEDICINE AND OF CLINICAL MEDICINE, IN THE CHICAGO MEDICAL COLLEGE, ETC., ETC.

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Original Contributions.

ARTICLE I.

PARALYSIS OF ONE LEG CAUSED BY RETROVERSION OF THE UTERUS.

By M. M. EATON, M.D., Peoria, Illinois.

Mrs. K. came under my care Feb. 3rd, 1866. She resided fifteen miles from this city, and was brought in town on a bed. Found her complaining of her left leg. There was great pain in the knee, and want of power of motion. General health tolerable; age about forty years. Native of N.H.

History of the Case.—About two years previous had sprained the knee in alighting from a carriage; some inflammation of knee followed, partially recovered in a month, when she fell down stairs—knee then became worse, paralysis of leg came on, and she was treated by several good physicians, when the inflammation subsided; but the want of motion and pain continued. She was placed in a "water cure establishment" for three months, became worse in general health, no improvement in leg, was taken to Chicago and treated by some one to the writer unknown, except by reputation (which is good), and was considerably improved; returned to her house without the use of her limb however. This state of affairs have continued till Feb. 3rd, 1866 (as before stated), with the additional symptoms of irritable bladder, painful menstruation, and difficult

defecation. On examining the leg, I found nothing abnornal, and was led to make an examination of the uterus from the obstinacy of the case, as presented in its history, and the present symptoms, and found an enlarged uterus retroverted. There being no symptoms of pregnancy, I introduced the uterine sound the next day, and, much to my surprise, there was a discharge of a pint or more of water, after which I could discover nothing in the cavity of the uterus, and proceeded to lift the uterus to its natural position with the sound, by the aid of two fingers in the vagina, the patient being placed on her face, with the hips elevated, which I accomplished readily; kept her in this position 24 hours, and then found the uterus had contracted and remained as I had placed it. She was now placed on her side. After a week, applied the solid nitrate of silver to the internal surface of the womb, three times, at intervals of three days, when membranes, like those of a ruptured cyst, were expelled, but nothing else. I gave elix. vulerianate of ammon. to quiet the nerves, with tonics, had the affected limb rubbed freely with a stimulating liniment. She rapidly recovered; in three weeks began to walk with a cane; felt some "bearing down pain;" applied an elastic abdominal supporter, which relieved this symptom.

April 15th.—Discharged cured, since which time she has been able to do her work, dance at parties, &c. Now keeps a boarding-house, is perfectly well this 14th of November, 1867. I thought this case worthy of record, as the difficulty of the uterus had been overlooked by those who had treated her for the two years she had been unable to walk, and demonstrates that enlargement of the uterus and misplacement may effect the limbs without producing immediately any symptoms referable to the organ. The discharge of water, I suppose, was caused by the rupture of a large hydatid growth, which I inadvertantly ruptured in making an examination, expecting to find a fibrous polypus, which, by its weight, occasioned the retroversion at the time of her fall down stairs. The caustic I used to kill this growth, and prevent its refilling with water, in which I think I was successful.

Every year I am more convinced that the diseases of the uterus are too little studied by general practitioners, thereby allowing many estimable ladies to pass off the stage of usefulness to fill premature graves.

I will digress from my subject simply to add my conviction of the propriety of physicians, especially in cities and large towns, devoting especial attention to some one branch of the profession (without advertising themselves as so doing), being assured that the public will, in time, appreciate what a man is best fitted for, and patronize him accordingly. By such a course, can we not best serve our age, and the profession of medicine?

ARTICLE II.

RADICAL CURE OF HEMORRHOIDS BY OPERATION WITH SMITH'S CLAMPS.

BY R. L. WALSTON, M.D.

Mrs. O., married, age 29, mother of two children, youngest 5 years old, called at my office, January 16th, 1867, and asked professional advice and aid. She was not much emaciated, but was sallow; pulse feeble, and about 100 to the minute; was weak, dyspeptic, annoyed with tinnitus aurium, giddiness, and palpitations. She had a condition of blood akin to leucocythemia, and had suffered for three years with a most distressing hemorrhoids, aggravated by dysmenorrhea and prolapsus uteri. Each catamenia had been preceded by from two to six days' intolerable suffering, which she affirmed to be greater than that of child-birth. Her bowels were habitually constipated, for which she got the following:—Ex. coly. com. et pulvis aloes, āā grs. xx., pulvis ipecac et capsicum, āā grs. x., oil sassafras, gtts. x. M. Ft. pills 20. S. One every night. For the existing anemia and dysmeeorrhea, she got, tinct. cimicifuga ℥iv., sol. cit. ferri ℥iiss., sul. quinia grs. x. l. M.S., teaspoonful three times each day.

Saw her again February 1st, improvement was very marked in all particulars, except the hemorrhoids, which, unexpectedly, were not improved. I determined upon immediate operation by the use of "Smith's Clamps" for radical cure. She got full dose coly. et aloes, to be followed by castor oil if bowels were not moved. Saw her on the morning of the 2d; bowels not moved, but catamenia had come in the night about one week too soon, and without the slightest premonitory pain. During the day the bowels were well evacuated, after which the operation was performed as follows:—The patient was "chloroformed" and placed on the table in position for lithotomy. After a thorough examination of the rectum, it was ascertained that, although the aloes had greatly reduced the size of the tumors, there were four external and one internal which required removal. The tumors were found to consist of a congeries of vericose veins, surrounded by hypertrophied areolar tissue, and covered by mucous membrane, more or less altered by chronic inflammation. The internal tumor was brought down to the verge of the anus by the index finger of the left hand, and siezed by a volcella, where it was firmly held till its base could be grasped by the clamps and removed with a strong pair of scissors, and cauterized with the actual cautery, at white heat, till not a jet of hemorrhage remained, and so on till all were removed, after which the patient got large doses of morphia, with poultice to the fundament, till pain and inflammation subsided, when she again resumed the general treatment. She is now, for the first time within three years, performing all her domestic duties, and seems to enjoy perfect health.

The clamps and the cautery are the *sine qua non* for all similar cases; also in prolapsus ani they answer an admirable purpose for removing longitudinal sections from the bowel, the cure being affected by lessening its caliber in the formation of cicatrix and unyielding adhesions.

Paris, Illinois, *November 27, 1867.*

ARTICLE III.

CASE OF ADDISON'S OR BRONZED DISEASE.

REPORTED BY A. YOUNG, M.D., Prescott, Illinois.

As the etiology of this disease is still involved in obscurity, any facts bearing upon it may be of interest to the profession. This iuduces me to give a brief resume of a case which was recently under my care.

Rev. Mr. R., aged 46, had for several years suffered from ill health, which was, however, not sufficient to interrupt his professional duties, except by brief intervals. As there was evidence of tubercular deposits in both lungs, his ill health was attributed to this cause. Last winter his general health began to fail; there was some disturbance of the digestive organs, but no apparent increase of the disease of the lungs. About the same time, the skin of the face, neck, and hands, which was naturally rather dark and sallow, began to assume a darker hue, and eventually became as intense as that of a jaundiced person, except that the hue had not the yellow tinge of jaundice, but more nearly resembled a person deeply tanned by exposure. The debility increased, until he was obliged to relinquish his occupation, but was able to be around, complaining of nothing but extreme lassitude and weakness, till September 16th, when persistent nausea and vomiting, with increase of prostration and faintness, supervened, continuing till his death, which occurred September 23d.

A *post-mortem* revealed crude, tubercular deposits in apex of both lungs, some fatty degeneration of heart.

Abdominal viscera presenting nothing worthy of note, except kidneys, and supra-renal capsules. Left kidney healthy in structure, with the exception of a small tubercular deposit. Left supra-renal cupsule filled with crude tubercle. The natural texture of the right kidney and supra renal cupsule entirely destroyed, its place being filled by a soft pultaceous mass, undoubtedly softened tubercle.

During the time that I knew Mr. R., there was nothing to indicate renal disease, the urine being normal in quantity and quality.

The Clinique.

NEURALGIA.—AN OBSCURE CASE.

Substance of a Clinic in the Medical Wards of Mercy Hospital, December 11th, 1867.

By N. S. DAVIS, M.D., Professor of Practical and Clinical Medicine, in Chicago Medical College.

The patient before you, gentlemen, is a fair representative of a class of cases which, from their persistence, often tax the resources of the practitioner to the fullest extent. He states that three years since, he was attacked with pain in the left hip, principally in the course of the sciatic nerve, though extending, at times, through to the groin, and a partial loss of motion in the limb. After a few weeks, the pain ceased, and he recovered nearly the perfect use of the limb. During the subsequent two years, he suffered occasional attacks of pain in the same parts, and the muscles of the left leg became weaker than those of the right. During the last year, he has been afflicted with neuralgic pains and morbid sensations almost every day, but extremely variable, both in their location and severity. The pains are more severe in the hips and lumbar portion of the spine than elsewhere; but they frequently change from one to the other, and to the shoulders, arms, legs, especially the heels, the neck, head, and face. In the head, face, and gums, the sensation is described as more of a burning and dryness than acute pain. These morbid sensations, whether of heat, dryness, or acute pain, are extremely changeable, both in their location and severity. They appear to be influenced some by atmospheric conditions, but not in a marked or uniform manner. There is no positive paralysis of either sensation or

motion, although the muscles of the left leg are weaker and a little more attenuated than those of the right. His appetite and digestion are good, his bowels regular, and his urine apparently natural in quantity and color. His countenance does not exhibit the physiognomy or expression of severe organic suffering, and his blood and tissues appear to be fairly nourished. I find no marks of disease in his fauces, or on his skin, but the Schneiderian membrane throughout his nostrils is thickened, redder than natural, and his nostrils constantly becoming filled with dry, hard, and black crusts. This condition of the nostrils, he says, has existed since his early boyhood; he being now over 20 years of age. He denies all knowledge of having had any form of syphilitic disease. But of his parents or ancestors I have learned nothing. Such is, briefly, the history of the case before you.

If the suffering of the patient is such as he describes, it is evident that the case must be classed among the neuralgias. To class it thus, however, does not explain its nature, or the essential pathological conditions on which the pains and morbid sensations depend. To aid in arriving at some definite conclusions in reference to this, we may state that all cases of neuralgia may be arranged, pathologically, into three groups:

First. Such as arise from disease or injury directly involving the trunk of one or more nerves.

Second. Such as arise from disease of some part of the central portion of the nervous system.

Third. Such as are caused by morbid conditions of the blood.

In those cases belonging to the first variety, the pain is necessarily limited to the single nerve involved and its branches, as we see in sciatica, tic doloreaux, etc.

In the second class of cases, where the seat of disease is in some part of the cerebral or cerebro-spinal centres, causing neuralgic pains in distant parts, such pains seldom follow the track of any one nerve; but they affect a particular locality or section, such as the forearm, the leg, the foot, the side, etc.

In the third class of cases, the pains are limited to no one nerve or part, but affect many nerves, and usually change with

rapidity from one nerve or set of nerves to another, as illustrated in the history of the case now before you.

The morbid conditions of the blood capable of causing neuralgia may be either toxemic or spanemic. That is, poisoned by the presence of some virus imbibed from without, or some effete or excrementitious matter, such as urea, the *materies morbi* of gout, etc.; or such an impoverishment of the blood, in relation to its corpuscles and nutritive constituents, as renders it incapable of affording the elements for healthy nutrition of the nervous structures. Those blood-poisons which, by their immediate or remote effects, are most apt to so modify the sensibility of the nerve structures as to cause persistent and distressing neuralgia, are the syphilitic, the gouty, the uremic, and the koino-malarial.

The effects of these poisons on the properties of the several tissues are not limited to the individuals primarily affected, but may be transmitted, more or less distinctly, to their offspring. This is particularly true in reference to gout and syphilis. Some of the most distressing and obstinate neuralgic affections of the heart, stomach, and extremities accompany the hereditary diatheses transmitted by gouty parents. I know a lady in this city, who was subject to sudden attacks of the most excruciating neuralgic pain in the great toe of one foot. It was accompanied by no swelling or redness, or other traces of inflammation. Her father had suffered many years from gout. It is doubtless true, that a large proportion of the cases of neuralgia arising from the syphilitic poison are caused by a low grade of specific inflammation, either in the neurilemma or in the periosteum lining the bony canals or orifices through which the affected nerves pass; but there are some cases that cannot be attributed to either of these pathological conditions, but, from their changeable character, are evidently dependent on some morbid condition of the blood and nerve sensibility generally. Although the patient before you admits of no known syphilitic influence upon his own person, yet the exceedingly erratic character of his neuralgic pains, the burning dryness of which he complains in his head, face, and neck, in connection

with the condition of the Schneiderian membrane of his nostrils, renders it quite probable that his condition is the result of hereditary syphilitic influence. The bridge of the nose is broad and looks a little swollen; and in examining the nostrils, the Schneiderian membrane throughout appears rough, thickened, and constantly secreting a morbid product that dries into hard black crusts.

That a certain degree of syphilitic influence is capable of being propagated to a very remote degree, we have abundant clinical evidence. Hence, we meet with it sometimes under circumstances where it would be least expected. It is not many months since I saw a lady, the mother of a family of children grown to maturity, who was laboring under such symptoms as had led her physician to confidently believe she had serous effusion into the ventricles of the brain. On placing my hand on her head, I discovered the existence of no less than three well-marked pericranial nodes; and all her symptoms of cerebral oppression disappeared under the subsequent use of iodide of potassa and conium.

During the last year, a gentleman, over 70 years of age, was brought here from a neighboring city, where he had led an active business life, and enjoyed a high social position. Several months previously, he had been attacked with what was regarded as apoplexy, or, at least, dangerous congestion of the brain. He was treated actively by men of high standing in the profession, and the first severe symptoms of oppression and stupor were relieved. But he remained with partial paralysis of one arm and leg; severe pains in his head and extremities; impaired memory, frequent mental hallucinations, and almost entire sleeplessness at night. I was told that his case was regarded by his medical attendants as softening of the brain, and mostly beyond the reach of remedial agents. His head being partially bald, I thought one parietal region was more prominent than the other, and, on careful examination, a periosteal thickening, with some tenderness, was found to extend over nearly the whole length of one parietal bone. The patient had noticed this prominence from the commencement of

his attack, and it afforded strong evidence that all his cerebral symptoms had been the result of a corresponding disease and tumefaction of the dura mater pressing upon one hemisphere of the brain. All the cerebral and paralytic symptoms disappeared in a few months, under the influence of country air, the steady use of six-grain doses of iodide potassa, aided by a very limited use of alterative doses of bichloride of mercury, and bromide of potassa at night to procure sleep. If this old gentleman had ever had syphilis (which I did not ascertain with certainty), it was, doubtless, more than forty years previously. Such cases, with many others that I might mention, are sufficient to show the necessity of inquiring carefully into the family history of patients laboring under chronic affections of the nervous system; and of observing carefully all local developments that might afford any information concerning the constitutional condition of the patient. In the patient before you, the fact that the morbid condition of the membrane lining the nostrils, already described, has existed from childhood; the peculiarly changeable character of his neuralgic pains and morbid sensations; while the general functions of nutrition, secretion, etc., seem to be well performed, have led me to think that the constitutional vice from which all his distressing symptoms have arisen, is a remote effect of the subtle poison about which we have been speaking.

If this view is correct, we need not expect any permanent advantage from the ordinary remedies for relieving neuralgic pains. His only hope of recovery must be founded on an effort to change his diathesis or constitutional condition. The means best calculated to effect such a change are as follows:

1st. Regular and judicious exercise in the open air, by moderate walking and riding, and, if possible, a change of climate.

2d. A plain, nutritious diet, chiefly of milk, farinaceous articles, and fruits, but from which must be rigidly excluded all fermented and distilled drinks, tobacco, and *strong* tea and coffee.

3d. The use of such alteratives as will be likely to effect a change in the elementary properties of the organized structures

of the body, without materially impairing either the plasticity of the blood or the general tone of the tissues.

The first two of these propositions need no comment. The advantages of moderate exercise; a mild and dry climate; plain food, and the exclusion of all nervous stimulants, are obvious to all of you. But what system of medication will effect the third indication? I shall, at present, direct a prescription consisting of,

℞. Iodide Soda, ---------- ℥iij.
Bichlorid. Hydrarg., ---------- 1 gr.
Fl. Ext. Conium, ---------- ℥j.
Simple Syrup,----------
Mint Water,----------āā ℥iss.

Mix, and take a teaspoonful before each meal and at bedtime.

I will have this continued until it produces a change in the secretion from the Schneiderian membrane, or slight traces of the mercurial influence on the gums. When either of these effects are produced, the prescription should be discontinued and the following given in its place:

℞. Iodide Potassa,---------- ℥iij.
Bromide Potassa, ---------- ℥vj.
Fl. Ext. Conium, ---------- ℥j.
Mint Water, ---------- ℥iij.

Mix, give a teaspoonful from three to four times a-day.

This may be continued for six or eight weeks, unless some unpleasant effects are sooner induced. In the meantime, if the patient becomes in any degree debilitated, as indicated by a feeling of lassitude, diminished appetite, and paleness of the lips, some direct tonic should be given conjointly with the treatment just mentioned. The best tonics I have used in such cases, have been either a teaspoonful of the syrup of pyrophosphate of iron, given half an hour after each meal; or a pill, composed of citrate of iron 2 grs. and strychnia $\frac{1}{30}$ of a grain, given at the same times.

A neglect to insist on good air and a proper use of tonics in conjunction with the usual alteratives, is one cause of failure in the treatment of such cases as the one under consideration.

Besides the hygienic and internal medical treatment which

has just been mentioned, I shall direct, with a view of affording temporary relief or mitigating the morbid sensations of the patient, anodyne frictions to the whole length of the spine each night and morning. For this purpose, a liniment composed of the camphorated soap liniment, ℥iv, and veratria, 3 grs., is as effectual as anything I have used. Sometimes, the judicious application of electricity to such cases will produce beneficial results. It should be applied in such a manner, however, as to obtain its tonic effects, rather than irregular shocks. But, gentlemen, the clinic hour has expired, and you will probably have an opportunity to see more of this case in future.

Proceedings of Societies.

MORGAN COUNTY MEDICAL SOCIETY.

The Society held its regular monthly meeting in the office of the City Clerk, in Jacksonville, October 12, 1867.

The Society met pursuant to adjournment, at two o'clock P.M., the President, Dr. Henry Jones, in the chair.

Dr. C. T. Wilbur, Permanent Secretary, being absent, Dr. Craig, of Arcadia, was called to the desk.

The minutes of the last meeting were read and submitted for action.

It was suggested that the report was not explicit as to the *large* doses of calomel used in croup by Dr. H. K. Jones.

Dr. H. K. Jones criticised the minutes, objecting to some statements therein relative to his treatment of croup and diphtheria. Also to the Report of a case of epithelioma, by Dr. Prince, protesting that it was discourteous in Dr. P. to report the case, and that as the minutes stood he was left in a false position before the members of the Society and the community at large, inasmuch as the minutes failed to record his objections made at the time to the form of Dr. Prince's report; and suggesting that a revisory committee be appointed to examine the minutes prior to publication.

Dr. Edgar, of Jacksonville, remarked that in his opinion such a committee of censors was unnecessary; that his ideas of professional etiquette would allow Dr. Prince, as consulting surgeon, to report said case of epithelioma; defended the minutes as reported by the Secretary, and, as neither Drs. Prince or Wilbur were present, he moved to suspend further action on the minutes until the next meeting. The motion prevailed.

Moved, by Dr. Johnson, and carried, that hereafter the minutes of each meeting be approved by the Society before published.

Dr. Wm. S. Edgar proposed Dr. Allen, of Murraysville, for membership. Referred.

There being no further regular business before the Society, the special order of the day was taken up, and the deferred essay of Dr. Edgar was called for. The Doctor responded in a brief but telling article on the "General Principles of Diagnosis," full of facts, suggestive and practical. Stating that in the practice of medicine we recognize two great classes of indications, general and local. The former to be diagnosed chiefly from the history and sensations of the patient, while in the latter, lesions of structure may be detected from physical signs. That no examination of a patient could be considered complete which did not include, not only a history of the patient, but also of his family and ancestry. Especially in all important cases this should not be omitted, as we may here discover some idiosyncracy or proclivity to disease and death, which may clear up many an otherwise obscure and difficult case. Referred to Abernethy as the first of the profession to direct and fix attention to the connection of many local affections with constitutional derangements. Stating that the great achievement of medical diagnosis is to trace through the complex labarynth of reflex and direct nervous symtoms and sympathies, the true origin of the disease in question. Suggesting that our method of examination and final diagnosis will be greatly influenced by our general theory of disease, and more or less thorough knowledge of pathology, anatomy, and physiology; was sorry to acknowledge that some members of the profession are so preöccupied

with theories of physiological and pathological changes incident to the nervous centres, together with the ebb and flow of the so-called vital principles as associated with intellectual and moral causes, that they readily account for all ailments, aches, and pains by some direct or reflex nervous trouble in the economy. With such, all protracted diseases are diagnosed typhoid fever, if fever attend, or neuralgia, if not attended by fever; as the former is understood by the community to be dangerous, and the latter endless, this diagnosis of course prepares the friends for the issue, be it good or evil. The Doctor did not understand this diagnosis to be always made as a matter of policy, but often as the consequence of the absence of a clear and definite opinion of the pathology of the case. But while we look away from physiology and human anatomy into fields of metaphysical theories and fancies, and follow entities of the imagination, no progress is made in diagnosis, however extended the practice or numerous the cases of observation may be. Much of this speculative pathology may originate in the natural tastes and habits of thought. Such minds more or less run after the vagaries of homœopathy, which removes practical medicine further and further from exact science. Observing, also, that the chief distinction between the scientific practitioner and empiric, is, that the former studies his case with reference to the pathology, while the latter groups symptoms and *prescribes*, trimming ingeniously, to hold his friends and make money.

Dr. C. Fisher, as previously announced, was, for want of time, unable to furnish an essay, and instead, reported two cases of dysentery conducted to a successful issue on the saline treatment. He took this occasion to report the above cases, since he had, on a previous occasion, discountenanced the practice, as suggested by his friend, Prof. Wilbur. The Doctor spoke at some length, eulogizing the practice.

Dr. Craig remarked that in the army he was generally successful with this plan of treatment; stating, however, that most of the cases were of recent attack, as in camp or on the march, where the men generally apply for treatment in the formative stage.

Dr. H. K. Jones thought it applicable in many cases of private practice; that where purgatives were indicated it was often the best, but thought close discrimination necessary here as elsewhere.

Dr. J. T. Cassell wished to know of those advocating the saline treatment, whether they ever knew of a recovery from true dysentery without *first* producing a biliary secretion, remarking that, in his opinion, no recovery could take place without it; that with a full, copious, and consistent flow of bile no case of simple dysentery could prove fatal; that mercury was not a *sine qua non* in producing a secretion of bile, many remedies being in successful use for this purpose, and that salts might so be used.

Dr. Henry Jones spoke at some length, reminding us of two forms of dysentery not generally referred to by writers on this subject, *i.e.*, the Summer, or Autumnal, and Winter varieties, wherein the symptoms were generally alike, but results strikingly different—the Winter variety seldom proving fatal, being of a simple catarrhal nature, and not attended by that hepatic derangement, as in the Autumnal. The Doctor related a recent remarkable case of dysentery as under his charge, not so much as to its therapeutical bearing as for its unusual symptoms, progress, etc., etc.

Dr. Edgar, Sr., remarked that he had considered the saline treatment indicated in congestion of the capillaries of the mucous membrane of the bowels. In the army it was valuable in the treatment of flux or diarrhœa, following exposure, lying on the cold, wet ground, etc., before they take to bed with symptoms of inflammation of the lower bowels, or dysentery proper.

Dr. Henry Jones, of Jacksonville, and Dr. Kimber, of Waverly, were appointed to write essays for next meeting.

With an expression of thanks to the gentlemanly City Clerk for the use of his rooms, the Society adjourned to meet at two o'clock P.M., on the second Thursday of November next.

JOHN W. CRAIG, *Secretary pro. tem.*

CLARK COUNTY MEDICAL SOCIETY.

This Society met on the 6th day of November, 1867, at the office of Dr. Gard, Martinsville. The numbers present fully appreciated the hospitality of Drs. Gard and McNary.

Dr. J. D. Mitchell, of Darwin, read a paper on "Shoulder Presentation." Drs. S. Juniper and D. O. McCord, of York, were consulting physicians.

At the time they visited the patient, the waters were evacuated, and the tonic contraction complete, consequently cephalic version was impossible, and it was also impossible to bring down the foot. In this condition, the only remedy seemed to be decapitation, which was, by mutual consent, performed successfully by Dr. Mitchell. The body of the child was then delivered without any difficulty, and then the head. The patient had a rapid recovery.

This report led to a spirited discussion on shoulder presentation, in which all the members participated.

Dr. F. R. Payne read a lengthy paper on the "Philosophy of Practical Medicine." He fully exposed the falacy of all theories that could not be supported by experience and careful tests.

The thorough study of diseases, and the effects of their modifiers, cannot fail to lead to important practical results.

Dr. Spencer read a paper on "Carcinomatous Diseases." For all practical purposes, he contended that it was only necessary to be familiar with three varieties—scirrhus, encephaloid, and colloid. These varieties he regarded as distinct, and if not removed, must, in all cases, result in death. The great question, he said, was, can cancer be cured? For the last twenty years he had spent much time in the study of this disease, and had thoroughly tested the value of many remedies. In some cases the knife may effect a radical cure; but if the disease is deep-seated, this remedy only brings temporary relief.

For many years he has abandoned the use of the knife, and relies upon sulphate of zinc locally applied to the tumor, in a fine powder. If the system is effected with the virus, he uses

tonics and other remedies, so as to thoroughly prepare the system before the application of the medicine.

Dr. F. R. Payne offered the following resolutions, which were unanimously adopted :—

Resolved, That the members of this Society heartily approve of the recent action of the convention of delegates from the medical colleges of the United States, held in Cincinnati last May, which was emphatically endorsed by a unanimous vote of the American Medical Association, urging an improvement in the whole work of medical education in this country.

Resolved, That we are fully satisfied that it would add greatly to the honor and usefulness of our profession if all of our medical colleges would adopt a possitive standard of preliminary education—the long terms of collegiate instruction—a systematic and successive order of study, with chemical instruction in public hospitals.

Drs. Gard and McNary gave a very interesting history of epidemic diphtheria as it prevailed in their locality during this fall. The treatment found most successful was very simple, and consisted in olive oil, chlorate, potass, and honey, mixed, and given freely. They also, after the first few days, gave mul. tinct. ferri. Under this treatment, nearly all the cases got well.

The members present reported that the last summer and fall had been remarkably healthy. We have had but very few cases of autumnal fevers. This was, doubtless, owing to the extreme drought in this part of the country.

The Society then adjourned, to meet in Marshall, Illinois, on the 1st Wednesday of January, 1868.

F. R. PAYNE, *Pres.*

J. D. MITCHELL, *Sec'y.*

Selections.

RÉSUMÉ OF THE CHOLERA OF 1867.

Dr. John C. Peters read a very able and interesting paper upon the progress and distribution of the late epidemic, tracing it from its indigenous source, to those portions of the globe where it may more properly be considered as exotic. The various routes pursued by cholera, and their immediate connection with the great lines of commerce and travel, were amply and clearly illustrated by very carefully prepared maps. As an abstract of this paper would scarcely do justice either to its author, or the subject matter, we present the greater portion of it in full, hardly knowing where to compress, since the whole paper itself is a condensed statement of interesting facts, logically and clearly connected.

The Dr. remarked that cholera has prevailed in few places this year; we have merely had to deal with the remains and dregs, as it were, of the great epidemic of 1865, rather than with any new infection, except perhaps in one place, viz., Hurdwar, in Hindoostan, near the source of the Ganges. The great epidemic of 1865, was particularly noted for the course or line of travel which it pursued, for this differed from all previous routes. It started from Bombay, passed up the Red Sea to Mecca, from thence to the Mediterranean, and from thence to all parts of Southern Europe.

Before the establishment of the overland route to India, and the use of steam-vessels on the Red and Mediterranean seas, cholera died out on ship board, before it could be conveyed from Calcutta around the Cape of Good Hope to England. It was formerly conveyed across Central Asia to Russia, because Russia had monopolized almost all the trade with the Asiatic tribes, and we know that cholera follows the lines of commerce. This Russian trade extended more especially from the towns of Astrachan on the Volga, and Orenburg on the Ural river, down to the very borders of Hindoostan. There is hardly a tent or house in all Central Asia, which is not supplied with Russian articles. No less than 3000 camels are employed in carrying iron pots alone, from Orenburg, and one company of traders employ 27,000 camels. Of course cholera has often travelled and will continue to travel overland from India to

Russia, as long as this extensive trade is maintained, and the towns of Orenburg and Astrachan will not only be the most exposed, but will also be the first to contract the disease. This was so well known in 1832, that the Asiatic cholera was called the Russian cholera when it reached the borders of England.

Another great line of cholera-travel towards Europe, is up the Persian Gulf, through Persia to the Caspian Sea, and Astrachan in Russia. These three great routes were illustrated by very carefully prepared maps.*

As cholera always, or at least very frequently, moves along the great lines of travel and commerce, the question whether it is communicable from one person to another, is a most important one, and this question is now considered as having been definitely settled by the experiments of Thiersch, in 1854, and the corroborative ones performed in England during the past season by Burden Sanderson, and Thudichum.

In repeating the experiments of Thiersch, these latter gentlemen discovered that when the cholera matter had killed one series of mice, another series which devoured the dead bodies of the former, were seized with the disease in equal virulence, the mortality ranging as high as 57 per cent.

Carrying on the experiments to a *third series* of mice, a mortality of 50 per cent. ensued.

It is very interesting to note that these experiments succeeded in August and September, but always failed in November, owing doubtless to the low temperature which prevails at that time. There seems to be some relation between this result and another great fact, that cholera almost always dies out in the fall of the year, or rarely continues during the winter. The author then took up the subject of microscopic fungoid growths, as connected with the causation of cholera, giving special prominence to recent observations made by the Germans, which would seem to prove a vegetable origin. It ought to be added,

* The author has very kindly placed at our disposal, many of the more important maps showing the course and distribution of the principal epidemics, which, starting from India and Hindoostan, have travelled through Europe, and from thence been transported to the United States, and spread itself, by means of military conveyance, to various army stations and Indian tribes. We regret that a want of space precludes us from availing ourselves of his generosity. These society Reports follow each other in such rapid succession, and demand so much of our space for mere *printed* matter, that anything but the most meagre illustration in the way of engravings is necessarily precluded, both on account of want of room and time. By frequent reference to ordinary maps, the careful reader will be enabled to follow the author's interesting researches, and thus, though perhaps less satisfactory, supply the want of illustrations.

that the ordinary vibriones have frequently been discovered in large quantities in the rice water evacuations, even while yet contained in the small intestines, showing merely that there is a remarkable proneness to decomposition of the intestinal contents. English observers, as a rule, have not placed much stress upon these microscopic bodies, being content to destroy their pernicious effects by liberal applications of carbolic acid, permanganate of potash, and other disinfectants.

In our own country we have had but little cholera this year, still that little has been in interesting quarters. Last season, viz., 1866, it went from New Orleans, up the Mississippi to the Arkansas, to Little Rock, thence to Fort Smith, from thence to Fort Gibson and Fort Arbuckle. It again broke out in all these places this spring (1867), and also at Helena and Memphis.

At Fort Gibson it commenced in June, and soon rose to the high mortality of 25 per day in that little place, and was also handed over to the Cherokee and Creek Indians, in that neighborhood.

Fort Gibson has an historical interest in connection with cholera, for the disease has prevailed there no less that four different times. It broke out in New Orleans in October 1832, and again in May 1833, and was carried to Fort Gibson in the third quarter of the year 1833, and destroyed 170 persons.

The cholera of 1848 began in New Orleans in December, and was carried up the Arkansas river in steamboats, and reached Fort Smith in the second quarter of 1849, and from thence was again carried to Fort Gibson, where 181 cases occurred in the U. S. army in July and August of 1849. In May 1851, cholera was again carried to Fort Smith by two companies of the 5th infantry, who came from Corpus Christi, Texas, with cholera.

It was also carried last year from St. Louis and Jefferson Barracks near it, up the Missouri river to Fort Leavenworth, where it again broke out this spring, and was carried to Forts Riley and Harker, and from thence to the new town of Ellsworth, which at that time was only six weeks old; but cholera reached it unerringly, because soldiers, rail-road laborers, and others coming from infected districts, passed through there with the disease.

This is a new line of travel for cholera to take from Fort Leavenworth. Formerly it was always carried northwest along the great Oregon trail to Forts Kearney and Laramie, and thence across the Rocky mountains.

Fort Leavenworth has great historical interest in connection with cholera. It prevailed there in 1833, in June, 1849, July, 1850, June and July, 1851, May, 1852, June, 1854, and again in 1866 and 1867. It has regularly been brought there from St. Louis, and was handed along the great line of travel to Oregon, along the Platte River to Fort Kearney, and from thence to Fort Laramie, and from thence to the Pacific coast. The reason that it has so often been brought to Fort Leavenworth is, that this place is not only on the great line of emigrant travel to Oregon, New Mexico, and the great plains, but also used to be the great depot for supplies, and a rendezvous or starting-place for all the United States troops going west. Now the line of travel is somewhat diverted to the Pacific Railroad.

In 1854, over 1000 emigrants died of cholera on the road, before they reached Fort Kearney, and many Indians, who loitered along the emigrant road from curiosity, and for the purpose of begging, paid a terrible penalty.

Thus, there have been no less than eight epidemics of cholera at Fort Leavenworth, all due to its intercourse with St. Louis. In 1866 there were 3500 deaths from cholera in that city, and this year 482. The cholera of 1832 did not reach Fort Leavenworth till 1833, but it reached the Sac and Fox Indians, then in Iowa, from Fort Crawford, near Prairie du Chien, as early as August, 1832, and from Fort Armstrong, on Rock Island, in September, 1832. The Black Hawk war was then going on, and the U. S. troops contracted the disease (then coming down from Canada) at Detroit, carried it to Fort Dearborn, or Chicago, and from thence to Forts Crawford and Armstrong, and gave it to the Sac and Fox Indians.

An outbreak of cholera has just occurred at the Philadelphia Navy Yard, in which there were forty deaths in the receiving-ship, traced to new recruits enlisted with incipient cholera.

An outbreak at Havana is now reported.

An English troop-ship, the Himalaya, direct from Malta, has brought the disease to Quebec. The Himalaya took two soldiers on board with premonitory diarrhœa or incipient cholera. They were the first cases of cholera which occurred on board the Himalaya. The disease died out on the long voyage from Malta to Quebec, but as infected articles possibly had been retained on board, Dr. Marsden carried out the strictest sanitary measures against her.

Professor N. S. Davis, of Chicago, has just published an article, in which he takes the ground that true Asiatic cholera can originate in any city and any country, irrespective of

importation. That the same causes which now are acknowledged to give power and activity to the infection, are capable of originating it anywhere. These causes are, high temperature, moisture, accumulation of decomposable animal and vegetable matter, and absence of proper ventilation and drainage. He denies that the epidemic of 1866 in Chicago, either in its beginning, progression, or decline, could be traced to any influence from the importation of persons or goods from other localities.

It is sufficient to say that the causes of common cholera prevail every year, but we never have Asiatic cholera in this country, except after it has occurred in Europe, that it always prevails in the East before it does in the West, and that it is easy to confound common cholera with Asiatic cholera.

The distinction between common or country cholera and the true epidemic pestilence, was made, even in Hindoostan, as early as 1817. In common cholera, which is allied to diarrhœa, cholera-morbus, etc., the loss is six or seven per cent., while in true Asiatic cholera, the loss is sixty to seventy per cent. It is a significant fact, that Dr. Davis has been remarkably successful in the treatment of what he supposes to be true cholera.

No one denies that diarrhœa, cholera-morbus, cholera-infantum, and septic cholera prevail very largely in the dirty portions of all great towns, in the summer. But neither of these diseases is true Hindoostanic or Asiatic cholera. The English cholera often approaches the Asiatic in severity, at least in appearance, but the majority of cases recover, and the more experienced English physicians do not confound these diseases, except, perhaps at epidemic times. But Dr. Davis' article, and another in the *Boston Medical Journal*, are interesting, as proving how closely ordinary cholera sometimes resembles its more malignant prototype.

Cholera in Europe in 1867.

Cholera prevailed at Warsaw, in Poland, between June and August of this year. There have been about 4000 cases and 2000 deaths.

There have been many cases in Switzerland, all traced to direct importation from Italy.

At Rotterdam (Holland), there were 18 or 20 cases a-day in the beginning of September, but by the 21st, it had decreased to two or three per day. It has remained at Rotterdam since 1865, or rather has broken out again in the summers of 1866–67. I do not know how it reached Warsaw, but Drasche, the

celebrated historian of cholera, says it was conveyed direct from Rome to Zûrich in Switzerland, by a family which fled from the former place: a child, which had already been sick with premonitory diarrhœa, was the first attacked, then the washerwoman, then a relative, then a friend who often visited the house. There were 591 cases in Zûrich this summer.

The rest of Europe has escaped this year, with the exception of Italy, Tunis, and the islands of Sicily and Malta. Sicily escaped in 1865, in consequence of a strict quarantine, but an insurrection breaking out in 1866, Italian troops were sent from Naples and other parts of Italy, and carried the cholera with them. In fact, this is the third year in succession that Naples has been visited by cholera, and the causes are obvious. There is not a street or lane in which putrid exhalations and pestilential smells are not emitted from many sewers and choked conduits, poisoning the air, and even rendering it necessary to rinse the mouth frequently, to get rid of the disagreeable taste. The water is also bad.

From Naples it was carried over to Palermo in Sicily, by Italian troops. This was so manifest, that the soldiers were charged with having poisoned the wells, fountains, etc., and much popular indignation was excited against them. In Sicily there were no less than 12,000 cases and 7000 death in two weeks, and 60,000 people left the island. In Italy, last summer, the ravages of the disease were very great, no less than 63,000 cases and 32,000 deaths having occurred in a few months. The same scenes of prejudice and superstition were enacted in Italy as in Sicily, aided by the machinations of the reactionary party against Victor Emanuel, especially by the old Bourbon party, and, it is said, by some of the priests whose religious establishments had been broken up.

The people would not only not drink water, neither would they use it for washing purposes. Doctors, soldiers, apothecaries, nurses, and witches, were accused of carrying the cholera about in powders and ointments, scattering it in the air, and putting it in the water. The use of disinfectants probably led to this malicious charge, and the well known malign influences of bad water, especially that contaminated with matters from the sewers, led ignorant people to believe, and designing villains to charge that the drinking water had been poisoned. Many apothecary shops were destroyed to get at the ointments and powders which were supposed to disseminate the disease. Railroad trains and the mails were stopped, and, finally, the dead were left to rot in the houses from whence all

the rest had fled. The soldiers were obliged to break open these houses and bury the offensive corpses. Finally, the dying refused to received the sacred wafer from the priests, fearing that it might be poisoned, and rejected both food and medicine from soldiers and priests. Soldiers, physicians, apothecaries, and supposed witches were mobbed as cholera-agents. The noble and zealous often showed as much ignorance as the superstitious. Thus, when cholera broke out in Albano, Cardinal Altieri, the bishop of that place, started at once from Rome, took all the money he could raise, stripping his palace of all clothing, bedding, and food, and took two physicians with him. When he reached Albano, he addressed the people at once, carried the sacred host barefooted through the streets, administered the sacrament to all, gave away all his linen and beds, took no sleep, and ate coarse food. He, of course, died in three or four days. So strong was the belief that the soldiers and the authorities caused the cholera, that a brigand, named Palma, ordered the professors and prefect of the town of Rossano to cause the disease to cease instantly, or he would come down with 4000 men, and burn and destroy everything before him.

A Society of the Sacred Heart of Jesus was formed to prevent cholera; each member to wear a cross cut out of red woollen, and surmounted by a little cross, the whole to be fastened upon a square of white woollen, with the inscription, "Stand off, the heart of Jesus is with me." Bishop Fetici, of Parma, granted forty days' indulgence to all who would wear the badge and repeat certain prayers daily.

How different has been the conduct and success of the English authorities, especially in and near Bristol, the home of Dr. Budd. They attended to the things which were before their eyes, and under their noses, and seemed to care little for the air above or the waters under the earth, except that used for drinking. Thus Pill, a little town five miles from Bristol, England, with 1800 regular inhabitants, became fearfully overcrowded by sailors and railroad laborers. There had been twenty-five cases of cholera. The town was very filthy, and had a ditch and brook filled with refuse matter from sewers; many privies emptied into it by open drains. Many houses had no privies, but their inhabitants used the banks above the brook for this purpose, so that it was absolutely covered with fœcal matter. All the cases could be, and were traced to direct contagion. There was no trifling with a few teaspoonfuls of carbolic acid or a handful or two of chloride of lime, but all

the privies and dunghills were thoroughly disinfected, one-half ton of sulphate of iron was put in the ditch, and the surface covered with chloride of lime. Where the brook emptied into the village, one hundred pounds of sulphate of iron was thrown in every morning; a strong solution of sulphate of iron was put in every drain, and carbolic acid, one-half pint to a bucketful of water, followed after. The privies were washed down with a solution of carbolic acid, fumigated with chlorine, and covered with chloride of lime and charcoal powder. Filthy greund was watered with solutions of carbolic acid, and covered with Calvert's powder. Infected houses were fumigated, whitewashed, and the floors scrubbed with a solution of permanganate of potash. All bedding and linen, soiled with cholera discharges, were, as far as possible, destroyed. Nurses were sent down from Bristol, and went to every house where cholera existed, and taught the inmates how to use disinfectants in bed-pans, close stools, chamber pots, etc.

Cholera discharges had been thrown upon a heap of refuse near the principal well of the town, this was so drenched with carbolic acid, that an accidental rain rendered the water undrinkable. Depots were established where medicines, beef-tea, milk, and ice could be obtained, and schoolmasters and clergymen were supplied with cholera medicine. It required four days to carry out these arrangements. During the first two days, fourteen fresh cases occurred; upon the fourth day, only seven new cases were noticed, and many of these had been previously infected. The last case occurred on the twelfth day after these proceedings were established. In twelve days, the epidemic was at an end.

As Malta is in the direct line of travel from Mecca to Alexandria, and many Mohammedans live on the island and often go on pilgrimages to Mecca, the disease now prevails there very frequently. In the week before October 4th, 1867, one hundred and forty cases, and ninety deaths had occurred.

Cholera in India in 1867.

In Hindoostan, the home of cholera, what is now graphically called the "Pilgrim nuisance" has been forced anew upon the medical and other authorities. The *London Lancet* of July, 1867, says: "There never was, perhaps, a more forcible illustration of the doctrine that cholera travels along the lines of human intercourse, than that supplied by recent occurrences in April, May, and June, 1867, at Hurdwar and its vicinity. One of those well-known great native gatherings took place there

this year, in April, 1867. Cholera appeared; the vast assemblage broke up, and dispersed towards their homes and spread the disease along the whole line of their route. From Hurdwar, as a centre, did the disease radiate outwards in the diverging lines taken by these natives."

The Indian correspondent of the *British Medical Journal*, of June 8th, 1867, writes: "The returning Hurdwar pilgrims seem to be carrying the cholera poison with them in all directions. Despite every precaution taken to keep them out of the English military station at Umballa, which is the first post north-west of Hurdwar, and scarcely twenty miles away, and that by means of a cordon of police and the troopers of the 11th Bengal cavalry, two infected pilgrims managed to get into the Bazaar of the 94th regiment of white troops. In consequence, some thirty cases of cholera soon occurred, including three medical officers, one lieutenant, some white soldiers, and many native troops and camp followers. Up to April 19th, 1867, it is known that 269 cases of cholera occurred in one column of pilgrims in the short stretch between Hurdwar and Umballa, and many more deaths happened in this and other columns which pursued this and other directions."

The great towns of Lodiana and Lahore which, like Umballa, are on the grand trunk road to the north-west, were reached next in order. From Lahore, cholera spread north-west in a direct line along the grand trunk road to Attock and Peshawur. In the London *Medical Times and Gazette*, we read: "During the present epidemic (1867), Peshawur, the advanced post of north-western India, has suffered most severely, though cholera is now widely disseminated throughout India, and exists at most of the military stations in Bengal. Ten per cent of the troops at Peshawur have already been attacked, and fifty-eight per cent of these have died."

At the present time, the English Government maintains a regular standing force between Hurdwar and Peshawur, of more than 12,000 men. A large English garrison is kept at Amballa or Umballa, the nearest point to Hurdwar, and at Lodiana, a little farther north. From Peshawur, the cholera of 1867 will almost certainly be taken to Cabul, thence to Balk, and finally to Bokhara, which latter place our friends the Russians are now beseiging, or have already taken. The cholera may reach the Russians there, and they may carry it back to Khiva, and thence to Astrachan and Orenburg, where it has always beeu previously conveyed by the Asiatic and Tartar tribes. The above facts are particularly interesting, because

cholera has always been conveyed to Central and Western Asia, to Persia, and to Russia, by this same route through Attock and Peshawur. In fact, if it is conveyed by persons, and not solely by winds, it can go in no other direction.

The province of the Punjaub, the extreme north-western province of Hindoostan, which has Hurdwar on its south-eastern boundary, and Peshawur, the border town, or extreme advanced post of all Hindoostan, on its north-western line, is enclosed on all its northern and eastern sides, by the Himalaya mountains, extending in one unbroken line for nearly 1000 miles in length, and about 80 in breadth, forming a continuous pile of precipices, rocks, snow, and ice.

Nothing resembling a wagon, or even ordinary beasts of burden, such as horses or oxen, can pass this barrier. Goods can only be carried on the backs of sheep and goats, and thus a scanty trade is carried on between Hindoostan and Thibet. The first and only break or pass in the Himalaya mountains is at the town of Attock, where the Cabul river makes its junction with the Indus.

The Province of Punjaub and the town of Attock, have great historical, commercial, and medical interest. Almost all the invasions from the time of Alexander the Great—336 B. C., have taken place along the line of the Cabul River, through the town of Attock. Almost all the trade of Hindoostan, with Persia, Independent Tartary, Central Asia, and Russia, almost every epidemic of cholera has followed the same route of travel and conquest, and one of the great nurseries of cholera exists at Hurdwar, just below the Southern boundary of the Punjaub.

I am not quite certain that the first great modern epidemic of cholera, that of 1817, escaped by this route. It probably did, but up to the present time no European has ever been able to go from Cabul to Balk, Bokhara, and Khiva, except in disguise, and the sources of information are necessarily scanty.

But in 1827, it destroyed 30,000 persons in Lahore, and passed from there to Cabul, over the Himalaya mountains, and from this last city, which is a great emporium for the merchandize of Russia, it was tranferred by caravans through Balk, Bokhara, and Khiva, to the Caspian Sea and Russia. At Cabul the two great lines of travel from Persia and Russia meet, and at Cabul the great line of cholera coming up from India divides, the one line leading to Persia, through the towns of Herat and Teheran, and finally to Astrachan; the other leads through Balk, Bokhara, and Khiva, to Orenburg, in Russia.

Another writer says: "Hurdwar is a great mart of commerce, and a celebrated place of Hindoo pilgrimage. In the month of April the pilgrims perform their ablutions in the sacred Ganges; and great numbers of merchants follow, forming one of the largest fairs known in Hindoostan. In 1807, no less than two millions of strangers attended them. In 1783, we are told by many authorities, that about one and a-half million dervishes assembled at Hurdwar, to celebrate a religious festival of peculiar popularity, and that in eight days 20,000 of them died of the cholera." It is perfectly evident from the above, that if cholera originates anywhere in India and reaches the neighborhood of Hurdwar, it will be strengthened there every year in April, and that every *twelfth year* this influence will be quadrupled, or more. Every year that cholera originates at Hurdwar, or is brought there, it will be conveyed northwestward through Attock and Peshawur to Cabul, and then will proceed due westward to Persia, northward to Balk, Bokhara, Khiva, to the nearest Prussian commercial towns, which are Astrachan and Orenburg.

Roberts says: "The largest of all the Indian fairs is held at Hurdwar, at the time of the vernal equinox. From 200,000 to 300,000 persons congregate there every year, and *every twelfth year* the number of pilgrims, merchants, and visitors frequently exceeds one and a-half millions. This fair is a focus for the produce of all India, from Calcutta in the south-east, to Bombay in the south-west, and all the intermediate provinces: also of Cabul, Afghanistan, Persia, Arabia, and Independent Tartary. Horses, cattle, camels, jewelry, Persian dried fruit, spices, shawls, cotton goods, cutlery, etc., are the principal articles of trade."

Of all the great seaport towns of Hindoostan, as connected with the transportation of cholera, Bombay has excited most interest since 1865; far more, in fact, than Calcutta used to. It seems well proven, that our last great epidemic, viz., that of 1865, was conveyed from Bombay to Makulla, on the southern Arabian coast, thence up the Red Sea to Mecca, thence to Suez, Cairo, and Alexandria, to the Mediterranean; and from Alexandria to Constantinople, Malta, Marseilles, and Southampton, England.

Bombay should have excited much more attention long ago than it has yet received.

The cholera of 1817 started from Allahabad, at the junction of the Ganges and Jumna Rivers, reached the Marquis of Hasting's army, just below in the Bundlecund, was carried

down to Nagpoor, and from thence to Poonah and Bombay, which it reached early in 1818, by means of troops passing to and from Bombay and Nagpoor to coöperate with the Marquis of Hastings.

There were nearly 16,000 cases of cholera in Bombay, from August 1818, to February 1819. In 1821, the Presidency of Bombay was again the seat of the disease, in its most mortal and malignant form; and it was carried over to the Persian Gulf by a convoy of English troops.

It returned again to Bombay in 1825, in great severity, and caused great alarm. Large cholera hospitals were built, and immense quantities of wood, tar, and gunpowder were burned, and large quantities of vinegar used as disinfectants. The epidemic of 1821 progressed up the Persian Gulf to Bushire, thence crossed Persia by way of Shiraz, Ispahan, and Teheran, to Tabrez and Tiflis, and from thence to Astrachan, in Russia, which it reached in 1823. At Astrachan the precautions of the Russian Government were so efficient that the disease was stayed, and did not reach that place again until the 19th of July, 1830, seven years afterward, when the old belief in contagion and infection having died out, the disease was allowed to spread to Russia, and also to Europe.

The cholera of 1829 at Bombay, was conveyed over the same route, but did not stop at Astrachan, for it was carried through to Poland and Prussia, to Hamburg, and from thence to London.

During the last year renewed attention has been paid to the frequency and extent of Hindoo pilgrimages, and their influence upon cholera. The river Ganges has been found to be dotted with holy places, from its mouth in the Bay of Bengal, to its source in the Himalaya mountains, at Hurdwar. At the mouth of the Hoogly, below Calcutta, is situated Saugar Island, the extreme point of which is considered by the Hindoos to make the junction of the Ganges with the sea, and is accordingly esteemed as one of the holiest spots in India. At a certain season of the year they flock thither in great numbers, for the purpose of bathing and offering sacrifices. There is much reason for the belief that the first great cholera originated here, and was carried up the Ganges, both to Calcutta and Jessore, although both of these places are filthy enough to generate cholera within their own limits. Several great festivals take place annually at Calcutta.

About 150 miles north of Calcutta is Gaya, the birth-place of Budda, and the scene of Vishnu's incarnation; a place

annually visited by vast number of pilgrims. Near Patna is the remarkable mountain Junghera, rising like an island from the Ganges. It was formerly considered the holiest spot along the whole river, so that thousands of boats and larger vessels were constantly to be seen there, as many Hindoos thought they could not die in peace without visiting it.

Benares, still further North, is the holy city of the Hindoos, of far greater sanctity to him than Mecca to the Musselman, or Jerusalem to the Jews, for here Mahadeo, the god of the Creative Principle made his last appearance on earth. It is so particularly sanctified, that all who live within a circuit of five miles, or visit it, go to Heaven, whether they wish to or not. The daily number of devotees on the banks of the river is 50,000, and at least 300,000 or 400,000 arrive annually at the great festival of Mala, in honor of Mahadeo; and the river is black for miles with the bathers' heads. The streets are both dirty and ugly. Many of them are so narrow that there is scarcely room for a palanquin to pass.

The Ganges waters near Benares is so holy that it is carried great distances. Bayard Taylor found the road swarming with pilgrims, each carrying his two jars of Ganges water to his home. In one afternoon he passed thousands and thousands of the lowest and poorest castes thus employed.

Allahabad is 76 miles North of Benares, near the junction of the Jumna and Ganges. It is called the city of Allah, or the city of God, because it is believed that a third invisible river flows direct from Paradise and joins the Ganges here. The festival at Allahabad takes place in February. Bayard Taylor found the road thronged with pilgrims returning from it, and most of the women, as well as men, carried large jars of Ganges water suspended from poles. We can now for the first time understand the almost inconceivable rapidity with which cholera spreads along the Ganges, both up and down, when an epidemic once commences. It must also be remembered that *the influence of these pilgrimages is increased from four to ten-fold every twelfth year.* But these religious festivals occur not only along the Ganges, but also throughout all India, and not only every year, but almost every month in the year. Thus every temple, like those at Juggernaut and Conjeveram, has a festival on the anniversary of its dedication, which lasts ten days, and people assemble from all parts of India.

Great attention has been paid by the English authorities to the sanitary condition of the pilgrims to the great temples of Juggernaut and Congeveram. Cholera used to occur at both these

places, and notably so on the twelfth year. Both these places have great historical interests in connection with cholera. The great epidemic of 1781, recorded by Curtis, the only one which has been accurately described previous to 1817, originated in the neighborhood of Juggernaut, at the annual festival which takes place early in March, when the moon is of a certain age. Colonel Pearse's force of 5000 men was assaulted at Ganjan, only a few miles below Juggernaut, on March 22, 1781, in the same terrible manner as were the forces of the Marquis of Hastings in the Bundlecund, *three times twelve*, or thirty-six years subsequently, viz., in November, 1817. The onset commenced with almost inconceivable fury. Men previously in perfect health dropped down by dozens, and those less severely attacked, were generally past recovery in less than twenty-four hours. The cramps of the limbs and body were dreadful, and the distressing vomiting and purging were present in all cases. Besides those who died, over 500 sick accumulated in the hospital in the course of a few days, and in a short time more than one-half of the army was on the sick list. This epidemic forced its way up some 250 miles to the North-east to Calcutta, and occasioned a great mortality among the native inhabitants, and then pursued its path still further Northward, but doubtless owing to the scantiness of the European population at the time, all attempts to trace its further progress are said to have proved fruitless; still it is well to notice that the third period of *twelve* years, or thirty-six years after, will bring us to the great epidemic of 1817; and the seventh period of twelve years, or eighty-four years, subsequently falls upon the last epidemic of 1865, a fact which I believe I was the first to notice.

The thanks of the Society were tendered to Dr. Peters for his able and interesting resume.

Dr. M. Herzog remarked that Thiersch had recently established the interesting fact, that cholera was not communicable from one person to another in less than twenty days.

The experiment of Pettenkofer proved that sporules of cholera could not exist where there were a plentiful supply of pure water. In houses supplied with water-closets, no cases of cholera occurred in New York city in 1867. There were two exceptions to this, but it was found that in these cases the water-closets were defective.

He considered that the cause of the periodical increase of cholera had a deeper cause than the twelfth year theory, and was to be explained by the prevalence of rain and subsequent dryness forming a subsoil stratum of moisture. He considered

that, during 1867, we were protected from the spread of the cholera by the plentiful and continuous rains which occurred during the whole summer, but as this will tend to establish a great rise in the subsoil water, he sincerely believed that we will be more in danger of cholera in 1868 than we have been in 1867.

Dr. Noyes, of the Committee on Portraits, reported favorable progress. A photograph of the Staff of the New York Hospital had been secured, and Dr. S. Katz had presented a valuable collection of portraits of the celebrated physicians and surgeons of France.

The Society then adjourned. M.

OVARIOTOMY; WHEN AND HOW TO OPERATE; AFTER TREATMENT.

Abstract from Remarks of E. R. PEASLEE, M.D., at N. Y. Medical Journal Association, May 24, 1867.

Reported by E. S. BELDEN, M.D.

Mr. President—Three years ago, I presented a paper to the Academy of Medicine on Ovariotomy, which was published in its "Transactions." My opinions as there expressed have not materially changed; but as some new things have been proposed since then, it is to these especially that I wish to call your attention this evening.

At that time there still remained some doubt in the minds of certain eminent surgeons whether ovariotomy should be recognized as a legitimate surgical operation or not. I then gave my reasons, and the statistical facts and arguments for the conclusion that it has as high a claim to be thus recognized as any other important operation, and I think very few would now be found to controvert it. During the past five years the operation ovariotomy in the hands of experienced ovariotomists has done more in proportion to the number of cases operated upon, for the prolongation of life, and less to shorten life than any other surgical operation which can be at all compared with it in point of magnitude. The percentage of lives saved by experienced ovariotomists during this time is probably not short of eighty per cent.; and these are patients who are doomed on an average to die without the operation within twelve to eighteen months, and, who, if they are saved thus, are likely to live as long as other women of the same age.

A point then in connection with ovariotomy, of much interest is, that the operation is followed in a very few days, either by death, or, on the other hand, by life and health of indefinite duration, as just stated. If successful, it is to the woman a resurrection. A patient remarked to me, "she felt as though she had commenced an entirely new life." The results suggest the expression of the poet:—

"Aut cita mers, aut victoria læta."

If this operation is performed in a case which is uncomplicated, it is one of the most simple of surgical operations. On the other hand, if complicated in a high degree, it is the most difficult and formidable operation the surgeon ever attempts to perform. And not even the most experienced operator can certainly determine beforehand, whether he has a simple or a complicated case. Where he had expected no difficulty at all, he may find a condition of things that will require all his coolness, deliberation, and caution, to enable him to get through without leaving his patient dead upon the table. I can say that ovariotomy sometimes demands more of all these qualities, and more care and judgment in the subsequent treatment, than any other I have ever attempted: though, during seventeen years of my professional life, I frequently performed all the capital operations. This peculiarity has not, however, been sufficiently recognized.

Encouraged by the facility of operation, and the frequent successes of the most favorable cases, many a physician has attempted ovariotomy, who would never think of attempting any other surgical procedure, not even the amputation of a finger. The results have been, as might be anticipated; the first case of real difficulty, or perhaps the second, terminating alike the operator's zeal and his success. It is, however, the fact that a simple case operated on at the most favorable time, will probably recover in spite of a large amount of operative bungling.

We all know the difficulty of diagnosis, in complicated cases, and the mistakes which have been made, but I omit this topic entirely.

The first question I will consider is, at what period in the development of the disease shall the operation be performed? The question lies, of course, between performing the operation early, while the patient is still in robust health, and deferring it until she begins to be somewhat reduced by the disease; no one would defer til she is just about to die in consequence of it.

Spencer Wells, and Baker Brown, maintain that the operation should be performed early, in full health. Mr. Hutchinson, of London, says it should be performed "as early as possible." Baker Brown once performed this operation when the tumor had been detected only eight weeks before. The patient died on the ninth day. Mr. Erichsen, Tyler Smith, and Dr. W. L. Atlee, of Philadelphia, take the ground that this operation should not be performed at this time; but when at length the patient begins to yield to the disease; and in this opinion I concur.

The reason in general, for the first proposition, is that the patient endures a severe operation better if it is performed when she is in full health; a statement which I have not found to be substantiated by statistics—as shown in the paper to which I have alluded.

I cannot here specify all my reasons for deferring the operation till the general health begins to fail, but the following are some of them:

In the first place, if the operation is performed upon a patient in full health, she is, other things being equal, more liable to peritonitis after it; and peritonitis destroys about one-fourth of all who die from the effects of the operation. Spencer Wells, operating on patients in full health, when symptoms of peritonitis appear, bleeds them, and in that way has sometimes saved them. And certainly this is very judicious practice, if the operation is performed thus early; but I think it would be better to diminish the risk of peritonitis, by some delay. Besides, if the patient is in good health, she is certainly in no immediate danger; and we make sure of adding a certain amount of time to the patient's life by the delay. And we may often wait six months or a year, and find her still in as good health as to-day.

Again, if we wait, further opportunity is given to perfect the diagnosis; and every one knows how difficult this is in some cases. Even Spencer Wells, whom I saw perform his 174th and 175th operations last July, and who has now operated over 200 times, still pronounces his diagnosis with caution. But he waits and reëxamines the case until he feels very positive; and he has very seldom had to record a mistake. If we wait till the abdomen is largely distended with fluid, it may become necessary to tap her, though still in pretty good health; and this operation may at once clear up all doubt, if any before existed, whether the case be one of ovarian tumor. If the tumor be one which can be very much diminished by tapping,

i.e., if there be one or more large sacks—I make it a rule to tap before deciding as to the operation of ovariotomy. Many of the tumors in this region, at first thought to be ovarian, are not so, but are cured by a single tapping. I have had two such cases, and consider this a very important point.

A patient, the wife of a professor in one of the Western colleges, called on me some years since, who had seen three or four of the most distinguished surgeons and physicians in this city, all of whom had pronounced her case one of ovarian tumor. I examined her case thoroughly, and had not the least doubt that it was such. She went to a distinguished surgeon in Massachusetts, who had no doubt as to its nature, and offered to remove it immediately if she wished. I declined to do anything in the case till tapping should be required; after which it would be time to decide respecting ovariotomy. A year afterward, the tumor began to interfere with respiration and digestion, and I considered that the time for tapping had come. I tapped her, but there was no ovarian tumor; and no farther operation was required. The uterus, prolapsed by the pressure of the fluid, soon regained its normal position, under appropriate treatment. She gave birth to a child about seventeen months afterwards; and has now enjoyed perfect health for the last five years. The sack was one of those developed in the broad ligament.

I have had another case like the preceding; and by waiting and tapping, I found a similar sac, instead of an ovarian tumor, and that no further operation was required.

Spencer Wells has noted a few cases where he had tapped tumors of this kind with the same result.

The fluid contained in these sacs is as transparent as water, and contains no albumen, (certainly in most cases,) and has great refractive power. It is entirely different from the ovarian fluid; especially in the fact of the absence of albumen.

Another reason for waiting, is, that the success of the operation is greater, other things being equal, if the tumor is *large;* and this for two reasons, I would not be willing to remove an ovarian tumor that was of the size of a fœtal head in a person of ordinary health.

1. If the tumor is large, by its constant pressure upon the peritoneum, the latter is rendered more insensible to irritation and consequent inflammation.

2. And another reason for not operating when the tumor is small, is, that if after the incision is closed up, if the patient should vomit or cough, there may be trouble from straining the

muscles, or even from a hernial protrusion through the wound. The latter occurred in one instance where I removed a fibrous tumor of the uterus, and the patient died in consequence. She had a severe cough at the time of the operation, and which she had concealed from me by taking opium, knowing that I would not operate if I discovered it. Three or four hours after the operation she began to cough violently. This I could not control; and the consequence was, a hernial protrusion between the needles, although they were but half an inch apart. As I was sixty miles from the patient when the hernia occurred, the bowel mortified before it was reduced, and she died six days after the operation.

As an argument against the assertion that a person in full health bears this operation, or any severe operation, better than when somewhat reduced in health, consider the following fact. If we divide the amputations of the lower extremity into two classes; first, operations performed upon persons in full health, as for elephantiasis, or in consequence of accidents, etc., called amputations of expediency or of necessity; and second, operations, performed upon patients somewhat exhausted by disease, called expediency, pathological amputations, as those for disease of the joints, etc. It has been found that while in patients of the first class (amputations upon persons in full health), 42 per cent. die; in amputations of the second class, only 14 per cent. are fatal. An operation upon an ovarian tumor, while the patient is in full health, is literally as well as logically an operation of expediency; and here, as with amputations, the best time for operating is, when the health of the patient is somewhat reduced. No ovariotomist has had better success than Dr. Tyler Smith, and he acts upon this principle, as I have before stated.

I have now under my observation some ten cases; some of which I have kept waiting a year or more; while others who, determined to have the operation performed, have found those willing to operate, have succumed. I have not yet had to regret deferring the operation, as I have explained.

In regard to the operation of ovariotomy itself, I can here only consider the incision; and the manner of treatment the pedicle of the tumor removed. In regard to the incision, the rule is, that it at first should not be more than one or two inches long, through the peritoneum, but somewhat longer, of course, through the skin, etc., than internally. Next I pass a steel bougie into the peritoneal cavity, and around the tumor, if possible, to ascertain if there are any adhesions. Afterward the incision is to be enlarged, or not, as may be required; the

rule being to leave it as short as will answer the purpose. It should, however, always be regarded as merely explorative, until the operator has decided that the tumor is to be removed. If he finds that there are extensive adhesions, or especially if to the alimentary canal, uterus, or bladder, it is very much better to make a long incision at once, that the adhesions can be seen before they are torn across; else they may be torn from the intestines, bladder, or uterus, instead of from the tumor, and troublesome hemorrhage may take place into the cavity of the peritoneum.

The tumor having been taken away, how shall we treat the pedicle? If the pedicle were in no danger of bleeding after its division, all operators would agree that it should be returned into its natural position, and the wound be closed up. But the *only* thing that we can rely upon, to prevent hemorrhage from the pedicle to the greatest possible certainty, is a ligature tied in a knot. If we have tied it tight enough to stop the circulation there, even for a few minutes, we may feel very sure it will serve us, unless it subsequently slips off. I shall consider other methods further on.

But if the legature is used, then the question arises whether it should be cut off short or left hanging out of the wound. The objection of Spencer Wells, to the ligature, is, that it always produces a sloughing of the stump of the pedicle. (The ligature being doubled and carried through the middle of it, one half is inclosed on each side.) "If it is cut off short, the result will inevitably be," he thinks, "that the ligature and the stump of the pedicle will slough off and remain in the abdominal cavity." But if the ligature is not cut short, of course it will be all the same so far as the slough is concerned.

Spencer Wells has even suggested the idea that, on the whole, it would be better to leave these ligatures coming out of the lower end of the wound; since inasmuch as there must be a slough, the dead, putrefying matter thus formed in the abdominal cavity, in this way, finds a conduit, which, by capillary attraction will drain it off.

Dr. Bouth, who also takes the same view, made some experiments upon the lower animals, and found that dead meat, even if fresh, in the abdominal cavity produced a low putrid fever, of which they died.

It is, however, a fact, that as large a proportion of the women treated in this way, by ligature, have recovered, as of those treated by other methods; and it is also true that most of them had no symptoms of low fever. None of my patients have had

any such symptoms, except as evidently produced by other causes, and I have always used the ligature.

Dr. Tyler Smith operated upon eight patients, with the ligature cut short, and they recovered without any symptoms of low fever at all.

And the very fact that patients do recover thus without fever, shows that no absorption of putrid matter has taken place, and therefore that no such has been formed. This was the conclusion I arrived at three years ago, when I read the paper to which I have referred. I have since had opportunity to demonstrate its correctness.

My first six cases were treated with ligatures, the end hanging out of the incision, and they all recovered. Since then, I have had an opportunity of examining two of my own cases that terminated fatally, in which I applied the ligature, and cut it short. They both died seventeen days after the operation. I have also examined another case lost, by another operator, after similar treatment of the pedicle. In none of these cases did any slough occur. In one instance, the ligature had actually cut off the portion which was included in it. In another, it had cut it to that extent, that there was left only enough to half fill the loop; and in a third, the ligature was so entirely covered up, that I could with difficulty find it. But in every case there had been an exudation of plasma over the stump and ligatures, which had nourished the part which was beyond the ligature, and attached it to the living tissue in its neighborhood. I state, therefore, without any hesitation, that I consider the point demonstrated, that there is no slough of the pedicle when we put a ligature around it, as I have explained. And, if there is no slough, what is the use of leaving one end of it hanging out of the wound? It seems to me, at the present time, therefore, that the best way to treat the pedicle is, to apply the ligature, cut it short, and close up the whole incision. Still, Spencer Wells most frequently used the clamp, though he recently stated that he is not yet decided which is the best way to treat the pedicle. I cannot here speak of the relative merits of the clamp, nor can I recommend the ecraseur, though it has several times succeeded.

The actual cautery has been applied to the pedicle by several operators, but more frequently, of late, by Baker Brown. Nearly a year since, I saw him perform his 101st and 102d operation of ovariotomy, and 32d and 33d, in which he had applied the actual cautery to the pedicle. In one of the two cases, the bleeding was not arrested by the hot iron; and he

then applied the ligature in the common way, and cut it short. The same has been done in several previous cases; and, of course, all these should have been reported as cases of treatment with the ligature, and not with the actual cautery.

Finally, it may, in time, be demonstrated that the ligature is preferable in one class of cases, the clamp in another, and the actual cautery in a third. Meantime, I hold this up to the present time, the ligature, as an exclusive method, is to be preferred.

Before closing up the wound, it is a question of much importance whether the blood, and other fluid emptied into the peritoneal cavity shall be sponged out or not. My opinion is decidedly that it should be. In every case of my own, I have undertaken to remove every drop of fluid. I lost one patient from septicæmia, produced by a small amount of blood becoming decomposed, which flowed from the omentum after the operation. I see no reason to doubt that the patient would have recovered if the blood had not been there. I have had three cases in which the patients must have died, if I had not reöpened the incision, and washed out the putrified fluid in the peritoneal cavity. My idea has long been, and still is, that where, on the one hand, there is no danger in putting into the peritoneal cavity, a sponge, first dipped in warm water; on the other hand, it may be of the greatest importance to do this. The peritoneum should be included in the sutures closing up the incision. If we leave the edges of the peritoneum gaping, as they will do otherwise, we will have a granulating surface, and the intestines, wherever they touch this surface, become adherent to it. Experiments on the lower animals have shown this. Then, when the pus forms, it falls into the peritoneal cavity and septicæmia will probably ensue. But I close with a few remarks on the after treatment.

I consider that there is much more responsibility attached to the after treatment of a case of ovariotomy, unless it is a very complicated one, than there is to the operation itself. I suppose I have been urged to perform this operation at least one hundred times, where I have declined, because the circumstances forbid my taking charge of the after treatment. In assuming the after treatment of a case, I consider that I am incurring at least three-fourths of the responsibility, and nine-tenths of the anxiety.

In regard to opiates, I think just enough should be given to keep the patient free from pain, and comfortable; not enough to stupefy. I like the action of McMunn's Elixir of Opium,

better than any of the other opiates, administered by the rectum if the stomach is irritable. I do not use strong doses of opium as soon as the operation is over, as I consider this objectionable. The patient should be allowed to regain her consciousness as soon as the operation is over. The operation, as well as the ether, has been depressing enough, and nothing more of the kind should be given until we see whether the patient is going to rally or not, and then is the time to give the opium. I have sometimes given a patient only thirty drops of McMunn's Elixir for the first two or three nights, and no more during the treatment. Baker Brown and Spencer Wells have given up the idea of large doses of opium immediately after the operation.

After the first week is over, very little is to be done, under ordinary circumstances. If septicæmia sets in from decomposed fluid in the peritoneal cavity, I would reöpen the incision. I know of no better treatment sufficient to allow the introduction of an elastic bougie, and inject blood-warm water, and let it at once return. The mixture of water and the putrid fluid cannot be as injurious as the fluid alone. The first time that I acted on this idea (in 1855) the patient was stupified by the poison. I injected one quart of water, and she immediately looked up and said she felt as though she had taken a bath. I relieved her in this way every day for a week, using two quarts to a gallon of water at a time. When I found the fluid very fetid, I used the *liquor sodæ chlorinatæ*, in the proportion of two drachms to the pint of water; finally, it returned without any odor at all, and from that time commenced a perfect recovery. In another case I resorted to these injections once or twice daily for fifty days; and, in a third case, I injected one hundred and thirty-five times in seventy-eight days. These three patients recovered, though I feel positive they would all have died, had not the decomposing matter been washed out of the peritoneal cavity. I also combined with the injections, the sulphate of quinine, and the hypo-sulphite of soda.—*Medical and Surgical Reporter.—South. Jour. Med. Sciences.*

Civiale's Collection of Calculi.—Not long before his death, Civiale exhibited to the French Academy, his collection of urinary calculi, from 2700 patients operated on by him during the 43 years of his professional career. In 1600 of the number he had performed his favorite operation of Lithotrity. —*Pacific Med. & Surg. Journal.*

CONSIDERATIONS UPON OTORRHŒA, PARTICULARLY IN CHILDREN, AND UPON A NEW METHOD OF TREATMENT.

Communicated to the Imperial Academy of Sciences, April, 1867.

By M. BONNAFONT, Corresponding Member of the Academy.

Translated from l'Union Medicale of July 2d, 1867.

All persons are not equally predisposed to this affection; in general, we observe it most frequently in constitutions that are lymphatic, strumous, gouty, etc. There are some exceptions to this rule; thus the affections of the ear are often developed after a cutaneous eruption, as scarlatina and rubeola, more particularly after the last, without our being able to give the reasons for this preference.

The age at which this kind of otorrhœa ordinarily manifests itself is from six to ten years, sometimes sooner, but rarely later; it is at this time, therefore, that we should hasten to direct an energetic treatment against the disease, for the simplest piece of negligence, on account of the susceptibility and delicacy of the organs of hearing, may allow the most serious lesions to encroach upon this apparatus. At this age, indeed, it is not the deafness alone that is to be dreaded, but even dumbness as the inevitable result of the loss of hearing. Nearly one-third of the children who are found in the establishments for the deaf and dumb, both in France and in foreign countries, owe their infirmity to nothing but the destruction of the apparatus of the middle ear, by neglected otorrhœas; while it is probable that if these children had been subjected to suitable treatment at the proper time, it would have been successful, at least in a large number of them, in arresting the progress of the disease, and in preventing thus an infirmity henceforth incurable, which must ever cause grief to the parents' heart.

Prognosis.—The prognosis of this affection is, we think, according to the extent or the seat of the lesion; thus the inflammation may occupy the whole surface of the canal, and it may present less of gravity than if it occupied a position even the most limited, in the neighborhood of the tympanum; in the first case the ear may be for a long time diseased without inducing any disorder of the hearing, while, in the second, it is rare that the tympanic membrane, whether by the continued contact with pus, or by the extension of the inflammation, does not finish by injuring itself, and by compromising, later on,

the function of the organ. Besides, another circumstance which renders these ulcerations at the bottom of the canal very much more serious than those which are developed in the regions nearer to the meatus, is this: we know that the glands which secrete the cerumen do not extend beyond the external two-thirds of the canal, and that beyond, the flesh is extremely slight, very red, very sensitive, and applied almost directly upon the bone, from which it is separated only by a very thin layer of cellular tissue. It follows, from this anatomical disposition, of the greatest importance in auricular pathology, that all that portion of the canal which is provided with glandular tissues may be for a long period diseased, without the subjacent bone being affected; while, in a region lower down, the slightest ulceration of the skin attacks, pretty soon, the periosteum and the bone, if we do not promptly arrest its progress. * *

Treatment.—The first indication to be fulfilled consists in making a careful examination of the canal, in order to ascertain the seat of disease and the degree of its extent. But in general, when we are consulted, it is seldom that the patients, large or small, have not the canal obstructed with matter; it is on this account that we must devote three or four days to these preliminary cases, consisting in cleansing perfectly the canal and in freeing it from all the matters which may conceal the ulcerations; it is for this purpose that I recommend the patient to take, three or four times a-day, ear baths of poppy water, then to make with the same liquid, injections, pretty strong, so that the liquid, in returning upon itself, may bring with it all the foreign matters. * * * * *

So long as there is no suppuration, it is less essential that the injections penetrate into the interior, but the case is different when pus is being thrown out from an ulcerated surface, especially if deeply situated. We can easily understand that if, while the meatus is obstructed by the engorgement of tissues, the suppuration accumulating in the lowest portions of the canal, will compress the tympanum, will cause its laceration, and later on, its destruction, as well as that of the apparatus of the little bones.

It is to avoid a similar accident, that I have employed for many years small dilating canulas of caoutchouc. Whatever may be the narrowing of the canal, we may always cause a little sound, previously coated with cerate, to glide in; and when this has been introduced, we can easily cause others of larger size to penetrate. But before replacing a sound by another, we should take advantage of the opening already made

to use injections, and to relieve, as much as possible, the bottom of the canal of the purulent matters which may be found there. * * When the discharge resists our endeavors and threatens to pass into the chronic form, the local treatment should be conducted in the most energetic manner, and by a succession of the means I have indicated. We must always commence by satisfying ourselves, by the use of the otoscope, of the region which the lesions occupy and whence the pus proceeds; when we have recognized the diseased point, we should at once cauterize with a small crayon of nit. silver, such as I use. These little cauterizations, made with care, cause very little, if any pain, and can be repeated every second day.

In the interval we may use astringent and styptic injections, with acetate of lead, of the strength of 1 gramme to 100 grammes of water, sulphate of zinc of the same strength, or, which is excellent, sulphate of alumina, of the strength of 2, 4, and even 6 grammes to the 100 grammes of the liquid. This last is what I most frequently employ, especially since, having tried it in the hospitals in gonorrhœa, it has given me very satisfactory results. * * * * *

When this malady appears in a strumous subject, or in a lymphatic constitution, it is very evident that, in this case, we should unite the local treatment with an internal medication, the energy and activity of which must be proportioned to the degree of the lymphatic character of the individual. The local treatment, without being neglected, should be conducted with prudence, and should follow the modifications produced by the constitutional treatment. If, on the contrary, otorrhœa be engrafted upon a sanguineous constitution, M. Kramer counsels, with reason, that we should not attend to the general condition, but should treat the case by purely local means. * *

In order that medication should be applied in a rational manner, it is necessary to see the parts affected; for it is not an indifferent thing to cauterize healthy tissue, the tympanum particularly. It is for the purpose of facilitating this examination for a large number of physicians, that I have caused to be made a novel otoscope, very simple, which does not require the assistance of any lamp, and whose shape renders it very portable. This instrument will be found of equally felicitous application in the examination of other organic lesions, such as those of the neck of the uterus, etc. * * *

This instrument has the great advantage of only occupying one hand, of allowing every kind of inclination to be given to

the light, and of illuminating the bottom of canals very obliquely situated, by directing into it a very intense luminous ray.

This otoscope is composed of two tubes: the vertical one, which serves as a handle, contains a small wax candle, such as is used to light up the little altars in the month of May. This tube is pierced at the bottom with many apertures, in order to allow the passage of air, which is necessary to nourish the light. The other tube, forming the principal body of the instrument, presents at its superior part a large opening corresponding to the axis of the vertical tube, and by which the flame of the candle escapes. Its posterior extremity is guarded by a small reflecting mirror in platinum, and the anterior by a bi-convex lens, the power of refraction of which has been calculated so as to make a very great concentration of the flame at the greatest possible distance, in order to fulfil the two following conditions: 1. To cause the greatest possible light to penetrate to the bottom of the auditory canal, notwithstanding its narrowness; 2. Then to leave between the illuminated point and the instrument sufficient space to allow not only of seeing well, but also, with the other hand, to perform in the canal or on the tympanum any operation that may be deemed necessary. This tube may be lengthened or shortened, in order to give to the luminous ray, a greater or less concentration, according to the cavities we desire to illumine.

The tubes may be taken apart, and one made to inclose the other, the instrument then is very compact, and very portable. —*Southern Journal of Medical Sciences.*

ROSIN-WEED—SILPHIUM LACINIATUM.

A NEW REMEDY; REPORTED A SPECIFIC IN ASTHMA.

By H. D. GARRISON, M.D.,

Within the last eighteen months, several persons have, in a more or less confidential manner, informed me, that the rosin-weed is an infallible remedy for asthma. Numerous parties, professional and non-professional have related to me cures effected by this agent in cases before considered wholly incurable by the medical faculty.

The substance of this information, derived thus from parties in most cases entirely unaware of the existence of any previous information on the subject, as they were in some cases even

ignorant of the existence of each other, not only makes the discovery justly common property, but gives it a degree of reliability not pertaining to the reputation of many new remedies.

I would not willingly assist in placing another unnecessary or doubtful remedy on the already overburthened catalogue; but were it possible would with pleasure aid in displacing a legion that only confuse and deceive the practitioner, and encumber the materia medica.

Farmers and others, intelligent on equine hygiene and treatment, quite uniformly agree that this plant is not only a perfect preventive, but a specific remedy for the heaves of horses, which is essentially the same disease as asthma in man.

Dr. G. H. Dadd of this city, in his new and very able work, entitled "*American Horse and Cattle Doctor*," page 125, says, "the husbandmen who reside in the vicinity of where rosin-weed grows, are well acquainted with the properties of this plant, and they declare that it is a specific for the treatment of asthma, or heaves. I have used the article in the form of fluid extract prepared from the root, and find it to be a very valuable remedy. The dose (for a horse) of the fluid extract is two (fluid) ounces, morning and evening." After describing some varieties of asthma or heaves, necessarily incurable, because of some lesion of the respiratory apparatus, Dr. Dadd further adds, that "such cases, although considered incurable, may be palliated by the fluid extract of rosin-weed." In a recent conversation with Dr. Dadd, he declared himself, more than ever, convinced of the great efficacy of this plant in the cure of *asthma in man* as well as in horses. It is singularly corroborative of the foregoing views that in those prairie regions where the rosin-weed abounds, also in those cities whose markets are supplied with hay from such sources, asthma or heaves in horses is quite unknown. During my residence in this city I do not recollect seeing a single case of heaves, though the streets are alive with horses which are not better used or fed than their race in the Middle and Eastern States where no affection is more common among them. Horses like this plant very much. On being fed hay containing it, they select all the rosin-weeds and eat them first.

Prof. King (Am. Dis. p. 871), ascribes to the *silphium perfoliatum* tonic, diaphoretic, and alterative properties, and alludes to its successful employment in ague-cake (enlarged spleen), liver complaints, miasmatic fevers, etc. In the same article, under the head *Silphium Laciniatum* and *S. Gumiferum*, in ad-

dition recommends them in "dry, obstinate coughs," and laconically adds, "said to cure the heaves in horses."

To the foregoing therapeutic properties, should they be established by more extended experience, may undoubtedly be added another, viz.: *powerfully diuretic.* A very intelligent gentleman, who has collected large quantities of this and other medicinal plants for us during the past two years, stated to the writer, a few days since, that the rosin-weed acts so powerfully on the kidneys as to cause dull pain, and even considerable distress in the region of the kidneys of those who used it to any great extent. This property, mentioned also by others, will suggest to the intelligent physician a much wider range of usefulness than has before been ascribed to this plant. There are many diseases of the urinary apparatus yet deemed incurable, while most of such affections are by no means uniform in their submission to treatment. It is hoped that this remedy will supply some deficiency in the list of real remedies.

The rosin-weed, *silphium luciniatum*, known also by the common names "polar plant" or "compass plant," from the circumstance that its leaves quite uniformly point North and South, is a member of the large order *Compositæ*, and abounds throughout the high rolling Western prairies. The stem is from three to ten feet high, and rough, with white hispid hairs. Leaves are one-half to two feet long, much divided, alternate and lower ones petiolate. The stalk bears four to eight large showy heads with yellow rays, and flowers in July and September. The root is large, sprangling, and of a tough, leatherly consistency. A smoothly cut surface presents a resinous lustre. The entire plant is possessed of a bitterish taste, but pleasant aroma, due to a volatile oil. Other species of this genus, as *S. Perfoliatum*, are also known as "rosin-weed," "Indian cup plant," and are possessed of similar, if not identical, medicinal properties. The whole genus, embracing five species, abounds in volatile oil and resin, which exudes in the form of small white spots or tears similar to those of mastich.

I have made a thorough chemical investigation of this plant to determine in what form its active principles could best be presented for administration; and conclude, that a fluid extract of high alcoholic strength is the only reliable form in which it can be used. The root when fresh is rich in essential oil, which is gradually converted by oxidation into resin, just as oil of turpentine by oxidation produces common rosin. As the resin of the silphium is not pulverizable, and as it is not yet known whether the good effects of the remedy are due to the oil or to

the product of its oxidation (resin), it is plain that no "powder" can fully represent the plant. A solid extract from which most of the oil is necessarily absent would not be eligible unless the activity is first shown to reside in the resin or some other part of the plant besides the oil.

Infusions of decoctions or oleiferous articles, though often the only form at command, are never more than fractional representations of the articles employed. The powdered root or plant would contain but little oil, owing to the thorough drying necessary to effect pulverization.

A fluid extract skilfully made as above indicated, will contain all the oil, resin, and every other medicinal proximate principle of the plant in their native state and proportions, together with all the freshness and aroma of the plant unimpaired, and will accurately represent the root, drop for grain. The dose of the fluid extract is from twenty to forty drops.—*Am. Ec. Med. Rev.*

ABUSE OF ALCOHOL IN MEDICAL PRACTICE.

We are rejoiced to witness among the leading physicians in England, a convention of the great evils flowing from the indiscriminate use of alcholic stimulants in diseases. A lecture by Samuel Wilks, M.D., delivered at Guy's Hospital, appears in the *London Lancet* for July. We quote from it the following paragraph: "I may remind you of what you yourselves have witnessed—that fevers will do well without this remedy. So wedded, however, are some to the idea of the absolute necessity of stimulant, that they have expressed almost incredulity when they have heard it stated that fever will terminate favorable without them. Of course, stimulants are often needed; but young persons with typhus and typhoid do far better, I believe, without them. That they make good recoveries on simple milk diet is a fact which my hospital cases prove, and which no argument can gainsay; and on the other hand I have seen a marked improvement take place in some cases when a stimulant has been left off. It is also a fact, that in bronchitis I have repeatedly seen improvement after stimulants have been omitted; and as regards heart-disease, I am convinced that the amount of mischief done by stimulants is immense. In the case of fevers and bronchitis, the weak pulse is often but an indication of extreme capillary congestion, and a stimulus to the heart only aggravates the evil. And in the case of a diseased and weak heart,

where repose is indicated, a constant stimulation by alcohol adds immensely to the trouble." Dr. Wilks also refers to the common practice of advising "a little" alcohol, without defining the precise amount—"a little" generally meaning just as much as the patient chooses to take. He says with great propriety, that it is as important to define the quantity of this article as of opium or any other medicine. Abused as alcoholic stimulants are, by many American physicians, it is evident that British practitioners are much more reckless and undiscriminating in their applications. It must be so, to draw out from Dr. Wilks such a remark as this: "I do speak strongly against this indiscriminate use of alcohol in disease, without due consideration of its need or of its results."—Perhaps the late Dr. Todd is more responsible than any other individual for the reckless and indiscriminate use referred to. The practice has been further extentended by the doctrine that disease is always weakness, as advocated by Chambers and others. We may infer the extent to which the profession in England is given to the practice of alcoholic medication, by the following curious passage, taken from the lecture before us: "I do not wish to speak too dogmatically of its ill effects, being fully aware that there are many holding very distinguished positions in the profession whose opinions are not in accordance with those I have expressed. Were it not for this reason, I should have used still stronger language than I have done; for even firm convictions must be restrained when we know what an amount of strong opinion can be arrayed against us."—An extraordinary statement this—scarcely creditable to a manly and independent mind. But what must be the status of the profession in Great Britain on this question, when the discovery begins to be made that alcoholic stimulants are not an absolute necessity in fevers, and when a distinguished physician feels constrained to apologize for such sentiments as are quoted above, and to withhold the free utterance of his conviction!—*Pacific Med. & Surg. Jour.*

FORMATION OF PUS BY INFLAMMATORY ACTION.

In a remarkable discourse, most eloquently delivered before the Berlin Medical Society, Dr. Cohnheim detailed the results of his observations on the formation of pus as a product of inflammatory action. These results are of sufficient significance to mark a new era in the history of pathological science.

The generally accepted theory of Pyogenesis, which refers

the origin of pus-corpuscles to the proliferation of cells or germinal matter in connective tissue, has received its death-blow.

The morphological resemblance of pus-corpuscles to white blood-cells has long been universally acknowledged. The modern discovery of the contractile properties with which they are both endowed, has tended still further to strengthen the belief in their intimate relationship. Dr. Cohnheim has now demonstrated their *identity* by proving that *pus-corpuscles are actually white cells which have emigrated from the blood-stream.*

He commenced his studies in the cornea, the classical ground for the study of inflammation. Availing himself of the well-known properties of white blood-cells to grasp and fix finely divided substances in their contractile stroma, he has been enabled to track these bodies, colored by aniline-blue injected into the blood, to the seat of inflammation, artificially excited in the cornea, and to recognize them as the cellular elements infiltrating the inflamed part. He has, moreover, succeeded, in a second series of observations, for which, for obvious reasons, a transparent vascularized tissue was selected, in actually observing step by step the emigration of the white corpuscles through the walls of the veins and capillaries of the inflamed mesentery into the surrounding tissues, and the pseudo-membranous fibrin effused on its surface.

The connection between these extraordinary facts and the well-known observations of Recklinghausen (Virchow's *Archiv*, 1863, vol. xxviii. pp. 157–197), on the presence of wandering contractile corpuscles in the plasmatic channels of the cornea, mesentery, and connective-tissue of other parts, will at once be evident.

Recklinghausen ventured upon no definite statement as to the origin of these bodies. He alluded to the probability of their being formed from the first connective-tissue corpuscles; but found it impossible to adduce any observation calculated to give support to this supposition. He had recognized their morphological identity with pus-cells, lymph, and white blood-corpuscles. He was acquainted with the increase and accumulation of these wandering elements, as "the essential change in the slighter degrees of inflammation;" but the chain of observations necessary to assign to them their true position and origin had to be completed by Dr. Cohnheim's elaborate investigations.

It is interesting to remark, for the purpose of illustrating the stages of continuity in scientific discovery that Recklinghausen had also demonstrated the possibility of contractile cells penetrating the corneal tissue from without by a very ingenious

experiment. He inserted pieces of cornea and finely powdered vermilion into the lymph-sacks of living frogs, and found them on removal after a certain time infiltrated with wandering lymph-corpuscles laden with granules of vermilion.—*Brit. Med. Jour.*, June 22, 1867.—*Med. News.*

Book Notices.

A Practical Treatise on *Shock* after Surgical Operations and Injuries, with special reference to Shock caused by Railway Accidents. By Edwin Morris, M.D., F.R.C.S., Surgeon to the Spalding Dispensary and Union Infirmary; author of "A Practical Treatise on Neuralgia." Philadelphia: Lippincott & Co. 1868.

This is a neatly printed and bound little volume of 89 pages. The subject of which it treats is one of practical interest and importance, and the author gives it a fair consideration.

Synopsis of the Course of Lectures on Materia Medica and Pharmacy, delivered in the University of Pennsylvania, with five Lectures on the Modus Operandi of Medicines. By Joseph Carson, M.D. Fourth Edition; Revised. Philadelphia: Henry C. Lea. 1867.

This is an octavo volume of 272 pages, the greater part of which is occupied with a simple syllabus or outline notes of Dr. Carson's Lectures. It was designed specially for the use of students attending the Lectures of the author, and, except the five lectures on the Modus Operandi of Medicines, it is of very little interest to any other class of readers.

On Diseases of the Lungs and Air-Passages; Their Pathology, Physical Diagnosis, Symptoms and Treatment. By Henry William Fuller, M.D., Cantab. Fellow of the Royal College of Physicians, London; Physician to St. George's Hospital, etc., etc. From the Second and Revised London Edition. Philadelphia: Henry C. Lea. 1867.

This is a small sized octavo volume of 479 pages, published in good style. The work is divided into two parts; the first presents a plain, practical, and detailed description of the Principles of Physical Diagnosis, and their application to the investigation of Diseases of the Chest. The second is devoted to the Consideration of the Pathology, Diagnosis, Symptoms, and Treatment of Diseases of the Lungs and their Appendages.

The work, as a whole, is one of real value, and will fully repay even the most busy practitioner for the time and money required for its perusal. For the student, it is one of the best text-books on the subject of which it treats. For sale by W. B. Keen & Co., 148 Lake Street.

Mechanical Therapeutics; A Practical Treatise on Surgical Apparatus, Appliances, and Elementary Operations; Embracing Bandaging, Minor Surgery, Orthopraxy, and the Treatment of Fractures and Dislocations. By Philip S. Wales, M.D., Surgeon U.S.N. With six hundred and fifty-two illustrations. Philadelphia: Henry C. Lea. 1867.

This is a full sized octavo volume of 685 pages, substantially bound in leather, and the text well illustrated by cuts. It seems to embrace everything of importance in the line of mechanical surgery, and is a work of great value, both to the student and the practical surgeon. For sale by W. B. Keen & Co., 148 Lake Street, Chicago.

Editorial.

Report on the Meteorology, Medical Topography, and Epidemic Diseases of Illinois.—Dr. R. C. Hamill, of this city, member of the Committee on the above subject for Illinois, made a very interesting report to the American Medical Association at its last Annual Meeting. The report was published in the Transactions of the Association, and a limited number of extra copies furnished to the author in neat pam-

phlet form. Dr. Hamill is still a member of the Committee of the Association, and is very desirous of obtaining full information concerning the prevalence of all epidemic diseases in this State. Will practitioners throughout the State communicate to him promptly such facts concerning any and all epidemics that come under their observation? If so, they will not only receive due credit therefor, but will very much advance the interests of medical literature and science.

Alumni Association of Chicago Medical College.—The first regular Annual Meeting of this Association will be held in the lecture-room of the College in the afternoon of March 3d, 1868. An address will be delivered by the President of the Association, and matters of interest to all will be presented for consideration. In the evening, the members will be cordially entertained at the residence of a member of the College Faculty.

It is earnestly hoped each *alumnus* "will address a letter to the Secretary, on or before the 15th day of February, giving a short history of his professional experience during the preceding year; and stating at length anything of special interest that may have come under his observation."

All *Alumni* of the Institution are earnestly invited to be present to participate in, and contribute to, the interest of the meeting.

S. A. McWILLIAMS, *Sec'y*,
166 State Street, Chicago.

The Proposed Changes in our Medical College System of Instruction.—We copy the following editorial article from the *Medical Record*, of New York, for Dec. 16th, 1867, for the purpose of showing how the proposed changes are viewed in the best medical periodicals of the East:

THE PROPOSED CHANGES IN OUR COLLEGE SYSTEM.

A circular has recently been addressed to the various Colleges, asking for a concerted action on their part upon the several prepositions offered by the late Teachers' Convention in Cincinnati. The committee that represents this association,

having a more or less permanent character, are perfectly competent to present the matter officially before the different Medical Schools, and in that light this last appeal for reform should undoubtedly be viewed.

They take for their basis of action the resolutions passed not only by the Convention but by the American Medical Association; and as our readers are already familiar with that document in detail, it is unnecessary here to do more than give an outline of the scheme. In brief, then, the changes proposed may be summed up under four heads: First, a positive standard of preliminary education; secondly, a longer time in which to acquire a knowledge of the various branches of Medical Science and Practice; thirdly, a systematic and successive order of studies for the student; and lastly, a certain amount of direct clinical instruction in a public hospital, as part of the senior course.

We have from time to time taken occasion, in our discussion of various matters connected with Medical Education, to urge the adoption of the suggestions therein contained, severally and collectively, and to endorse *in toto* the action of that body. We have not only been of this opinion, but have been ready to go a step or two farther in upholding measures that, under the present system, would seem almost impracticable. But this is by the way.

The objects of the circular which is before us are not only intended to explain away many of the arguments which have seemingly been brought forward by some of the schools against the resolutions referred to, but also to fix a period to the present system of medical instruction. Its first intention has been, to our way of thinking, well carried out, and we have only to hope that its second object will be also attained in an equally satisfactory manner.

In reference to the question of preliminary education we have fully expressed our views, and the plan which we took occasion to suggest was the examination of the students by some competent persons other than the faculty, in order that no plea that any unfairness or partiality could be brought forward. This at the time we believed was practicable, and we are still of the same opinion. There may be some other means adopted to ensure this end, but this matters not, so long as the spirit of the resolution is carried out. The committee have, with some show of policy, merely presented the necessity for the adoption of some feasible means without suggesting anything definite. This is hardly the wisest course that could be

pursued, inasmuch as it is advisable to form as a responsible body a distinct platform upon which all points at issue must be directly settled. A failure to distinctly define the manner in which these preliminary examinations should be carried on may still leave the whole question open, a prey to misconceptions and to the temptation of practically ignoring the subject altogether.

On the other proposed changes the committee is more to the point. In regard to the increase in the members of each college faculty good reasons are given. The contemplation is to give four lectures per day to each class throughout the whole college term of six months. We cannot see how this can be objected to by any faculty. The necessary increase of their members will so divide the labor as that each one can perform his duty to himself and to the students. To the supposed decrease in the income of each professor by the adoption of this course, the committee have offered a satisfactory and conclusive answer. The increase in the faculty they assert is amply compensated for pecuniarily by the requirement that each student shall pay full fees for three courses of lectures instead of two. With this the teachers can find no fault, and the student will not be liable to demur, especially when no choice is left him in order that he may be sure of his diploma in the end. The increased expense for the whole term will not be felt any more for the third year than for the two previous ones, while in the end the increased outlay on his part brings him a richer premium in the allowance of extra time to benefit by the instruction which he receives.

The section referring to the branches to be taught during each term was simply for the purpose of naming a definite course to be pursued by each college, so that such a uniformity in the general system might be obtained as would allow students of different classes to transfer themselves to different colleges without occasioning confusion.

In order to obviate embarrassment in making the change from the present system of college instruction to the one proposed, the committee prudently suggest "that all students who have so nearly completed their period of study at the time fixed for making the change that an attendance on an additional course would render them eligible to graduation, should be allowed to complete their course by attending the Senior department under the new arrangement; while all who are in the first half of their period of study should be subject to the new arrangement in full." This proposition is an eminently proper

and practical one, and should effectually do away with the principal obstacle to the speedy carrying out of the new plan.

The time set for the inauguration of these changes is during the winter term of 1868-9, and it strikes us that there is ample opportunity offered to all the colleges to discuss the matter by answers to the following questions by the committee:—

1st. Do your faculty, together with the governing authority of your College, approve of the several propositions as a whole?

2d. If you do not approve of the plan of revision as a whole, what changes would you suggest?

3d. If you approve of the plan as a whole, or of all its essential features, will your College be ready to adopt it practically, and issue your Annual Announcement for the Chicago term of 1868-9, in accordance therewith; provided all the principal Medical Colleges in this country (or at least those in the cities of Boston, New York, Philadelphia, Baltimore, Richmond, Charleston, New Orleans, Louisville, Cincinnati, St. Louis, Chicago, Buffalo, and Albany) will agree to do the same at the same time?

These answers are to be addressed to the Chairman, Dr. N. S. Davis, of Chicago. We hope that every respectable Medical College in the land will consider it a bounden duty to give the subjects referred to the fullest consideration, and be prepared when the time comes to agree, if not entirely upon the plan as set forth, at least sufficiently so to insure that uniformity of action which shall crowd out every element but honorable competition and an earnest desire to raise the standard of Medical Education.

There is no reason why a response should not be received from every College by the committee before the first of March next, when opportunities would be given to call another Convention of Medical Teachers, and have a report presented to them in due form.

We hope the last paragraph here quoted, will attract the special attention of the several college faculties. The questions proposed by the committee merit a fair and explicit answer; and it is exceedingly desirable that these answers should be in possession of the committee by the time specified above.

Dr. Roberts Bartholow has been appointed Professor of Materia Medica and Therapeutics in the Medical College of Ohio.—*Medical Record.*

A Friend has sent us the following rare specimen of medical opinion and prescription:—

It will do either for a laugh, or for a sample of human ignorance and gullibility.—[Ed.

Sylvester Green Co., Wis.

Dec. 9, 1867.

Mrs Catherine Reutschler

your lungs be somewhat Weak they Don't feel Natural, the lungs Are not organicly Diseased your liver very torpid the liver Don't secrete its Portion of bile it throws the bile into the Gall Ducks & that Don't receive it As it should therefore it Passes into the Stomach & blood Affecting your stomach Much At times you have Distress to your Stomach At times that the World Don't know of the Digestive organs Are Weak the food Lies hard in your Stomach At times the Affection of the liver causes Pain between your Soulders At times the Stomach Affects the Nerves the nerves Affect your head . At times your Kidneys are Weak the Glands that Run to the Neck of the Bladder Are irrtated this Affects the Water At times the Weakness of the Kidneys Causes weakness in your back & such A Dull Heavy tried feeling in your Hips & Limbs At times

Prescription.

one oz of Colombo Root half oz of Rheubarb half of extract of Dandelion one fourth of A oz of Aloes Put All of these in one quart of Whiskey take one table spoonfull A half hour before breakfast.

half oz of Peruvian bark one fourth of A oz of balm Gilead buds Put these in one Gill of Alcohol let it stand twenty four hours then Add one Pint of Maderia Wine take one table spoonfull A half hour before Dinner & Supper

the White of one hens egg one table spoonfull of loaf sugar one table spoonfull of fourth Proof brandy beat All well together & take this quantity in the Middle of the Afternoon take A Pill of Asafoedita the Size of A Common Pea in the Middle of the forenoon Eat Light food Drink Dandelion Coffee with your Meals scorch the Roots & Make it As other

Coffee Mix equal Parts of Mullen leaves & Pulverised Cinnamon bark together & smoke it shortly After each Meal the Mullen leaves that Grow Near the Ground Are good now. for A Linament one oz oil of origenum half of Sweet oil half oz of Spirits hartshorn half oz of Laudanum

Put All of these together Put it on your forehead & temples Morning noon & night & smell of it At the same time

Continue these Medieines Six Weeks then you Are to be be seen Again

you will be better if you Do As Directed.

examination & Prescription

by Dr J Dodge.

CORRECTION.

Editor of Examiner.—In the article on "Tetrachloride of Carbon," of last month, there is an error, implying that Dr. Sherman's experience in giving anæsthetics amounts to "some thousands of cases." It should read "above a thousand of cases." E. ANDREWS, M.D.

Money Receipts till Dec. 25, 1867.—Drs. O. B. Ormsby, Murphysboro, Ill., $3; G. Wheeler Jones, Danville, Ill., 3; W. R. Atkinson, Mt. Hope, Wis., 3; M. W. Wilcox, Mattoon, Ill., 5; Q. M. Triplett, Little Rock, Ill., 3; J. H. Hollister, Chicago, Ill., 3; L. J. Burrows, Janesville, Wis., 3; W. H. Price, Danby, Ill., 3; S. Wickersham, Chicago, Ill., 3; S. K. Faulkner, Whitesville, Mo., 3; Alonzo Clark, Beloit, Wis., 3; G. D. Maxson, Nile, N.Y., 3; John Lewis, Ogden, Ind., 3; P. J. Morris, Jericho, 3.

Death from Chloroform.—A death from chloroform is reported in Chicago. The cause is referred to simple asphyxia from the toxic effects of the article, although portions of cracker, of which the patient had partaken shortly before the administration of the anæsthetic, were found in one of the bronchial tubes. The chloroform was pure, and but an ounce was administered. Every means to restore the patient was resorted to without avail. *Medical Record.*

The packing of bottles, filled or empty, is now performed more safely, closely, and rapidly than heretofore, by means of India-rubber rings slipped over them. The rings cost only once, and can remain on the bottle as long as it lasts.—*Med. Gax.*

MORTALITY REPORT FOR THE MONTH OF NOVEMBER:—

The monthly report is as follows:—

CAUSES OF DEATH.

Accidents,	11	Heart, valvular disease of,	2
Apoplexy,	2	Hemorrhage, umbilical,	1
Avota, aneurism of,	1	Hepatitis,	1
Augina, pectori,	1	Hydrocephalus,	2
Asphyxia, chloroform,	1	Hydrocephalis, acute,	1
Abscess, psoas,	1	Intemperance,	1
Birth, premature	13	Intemperance and Morphine,	1
" still	27	Insanity,	1
Brain Congestion of,	5	Inanition,	6
" Inflammation of,	6	Jaundice,	2
Bowels, inflammation of	1	Kidneys, disease of,	1
Bowels, obstruction of	1	Liver, cancer of,	1
Bright's Disease,	1	Laryngitis,	3
Bronchitis,	8	Lungs, congestion of	1
Cancer,	1	Lungs, hemorrhage of,	2
Cancer, encephaloid,	1	Lumpus,	1
Cancer, calcum,	1	Measles,	8
Cancer, knee-joint,	1	Meningitis,	3
Catarrhal Inflammation,	1	Meningitis, Cerebro-Spinal,	4
Croup,	18	Meningitis, Tubercular	1
Croup, diphtheric,	1	Morbus Coxarius,	1
Cholera Infantine,	4	Old Age,	5
Cholera-Morbus,	1	Peritonitis,	3
Convulsions,	27	Peritonitis, puerperal,	1
Cyamosis,	2	Pericarditis, acute,	1
Debility,	7	Paralysis,	2
Delirium Tremens,	2	Paralysis, agotous,	1
Diarrhœa,	3	Phthisis Pulmonalis,	34
Diarrhœa, cronic,	1	Pneumonia,	16
Diphtheria,	9	Pneumonia, typhoid,	3
Dropsy,	4	Scrofula,	1
Dysentery, chronic,	1	Small-Pox,	18
Dysentery,	4	Suicide,	2
Enterites,	1	Stomach, cancer of	3
Epilepsy,	3	Tabes Mesenterica,	9
Erysipelas,	2	Tetanus,	1
Exhaustion,	1	Teething,	5
Fever, congestive,	1	Throat, disease of,	1
Fever, typhus,	4	Trismus,	1
Fever, typhoid,	26	Urennia,	1
Fever, scarlet,	3	Whooping-Cough,	1
Fever, ship,	1	Wound,	1
Heart Disease,	4		
Heart, hypertrophy of,	1	Total,	370

NATIVITIES.

Chicago,	195	England,	8	Scotland,	4
Other parts U. S.,	72	France,	3	Sweden,	3
Austria,	1	Germany,	42	Switzerland,	1
Belgium,	0	Holland,	1	Wales,	1
Bohemia,	2	Ireland,	37	Poland,	1
Canada,	2	Norway,	11		
Denmark,	3	Prussia,	10	Total,	370

AGES OF THE DECEASED. — Under 5 years, 156; over 5 and under 10 years, 17; over 10 and under 20, 11; over 20 and under 30, 40; over 30 and under 40, 43; over 40 and under 50, 20; over 50 and under 60, 14; over 60 and under 70, 12; over 70 and under 80, 9; over 80 and under 90, 6; 90 and under 100, 1; premature births, 13; still born, 28; unknown, 0. Total, 370.

COMPARISON.

Deaths in November, 1867,	370
Deaths in November, 1866,	382
Decrease,	12
Deaths in October, 1867,	428
Decrease in November,	58

SEXES.

Males, 204 | Females, 166 | Total, 370

COLOR.

Colored, 7 | White, 363 | Total, 370

MARRIED AND SINGLE.

Single, 263 | Married, 107 | Total, 370

DEATHS IN EACH WARD.

The following table gives the average of deaths in each ward, on the basis of the population of 1866:

Ward.	Mortality.	Pop. in 1866.	One death in		Ward.	Mortality.	Pop. in 1866.	One death in	
1	8	9,668	1,208	1-2	14	19	12,108	636	1-5
2	24	12,985	541	1-4	15	30	15,766	525	1-5
3	20	15,738	786	18-20	16	18	14,912	789	5-9
4	14	10,884	777	6-14	County hos.,	14			
5	18	9,610	533	16-18	River,	1			
6	23	10,580	460		Bridewell,	2			
7	39	18,755	483	1-2	Home of the Friendl's,	0			
8	16	10,429	651	4-5	Marine hos.,	3			
9	30	13,940	464		Mercy hos.,	7			
10	9	11,416	1,266	1-3	Orph. asy.,	2			
11	24	12,924	537	4 5	St.Joseph hos.	1			
12	31	12,695	409	1-2	Lake Mich.,	0			
13	17	8,188	481	3-5					

Total, 370

THE PRIZE ESSAY ON PHYSICAL LONGEVITY—by American Popular Life Insurance Company. This company offered some time since a prize of $500 for the best essay upon this subject. Two communications of the number presented were so meritorious, and it was so hard to decide the question of superiority that a prize was given to each. The successful authors were Dr. J. H. Griscom, of New York, and Dr. J. V. C. Smith, of Boston.—*Medical Record.*

A GRANDMOTHER AT TWENTY-EIGHT.—An old practitioner who is giving the reminiscences of his medical experience in the *Gazette Medicales de Lyon*, enumerates among them the case of

a young girl in his vacinity, who became the mother of a healthy child at the age of fourteen. The child was a girl, and in her turn became a mother at fourteen years of age. The young grandmother, he says, is still hard at work in her village, and is very proud of her title to a uniqne frame as a grandmamma at twenty-eight.—*Medical Record.*

Dr. E. S. Connor accepts the Chair of Medical Chemistry in the Medical College of Ohio, vice Dr. Roberts Bartholow, resigned.—*Medical Record.*

Lithotomy and Lithotrity.—In the *Nashville Journal*, for July, Dr. Paul F. Eve gives a tabular statement of 90 operations for stone performed by him, during a period of twenty-five years. In 78 of these, the bilateral operation was performed, resulting in 70 speedy cures and 8 deaths. Of the latter, Dr. Eve thinks four should not have been operated upon, as they were very unfavorable cases; a fifth died of dysentery when the wound had nearly healed. The ages were: 45 under 10 years; 24 between 10 and 30 years; 3 between 30 and 50 years; 6 over 50 years; and the average less than 16 years. The remaining 12 cases were of a mixed character, viz., lateral and high operations, vaginal section and lithotrity. Three of the number died. Dr. Eve attributes the death in three cases to want of skill, (for during the war, the operation had to be performed without proper instruments,) and adds: "I honestly believe, that of these cases of lithotomy not more than two or three can be put down as fatal cases under ordinary circumstances." In contrast to these results of *lithotomy* are the records of 70 cases of *lithotrity* performed by Mr. Henry Thompson, of London, and published in the *Lancet*. Only four deaths occurred in these cases, and one was from organic disease of the kidney, after complete relief from the calculi and recovery from the effects of the operation. Very few of the patients were under 50 years of age, and the majority were over 60 years. The average age of all the patients was 62 years. Many of them were in circumstances of health which rendered interference very hazardous, and the greatest care and attention were necessary. Cases were not selected. The most striking fact in this contrast is the great difference in the average age, the lithotomy cases averaging less than 16 years and the lithotrity cases about 62 years, and the records of the latter fully justify Mr. Thompson in heading his article, "Proofs that lithotrity is an eminently successful operation."—*Pacific Med. & Surg. Journal.*

A Doctor's Bill in the Reign of William III.—In the diary of Sir Thomas Rokeby, justice in the Court of Common Pleas in the reign of William III., just published, occurs the worthy valetudinarian's doctor's bill for only two months, October and November, 1697:—"Purging pills, 2s.; leeches, 6d.; aperitive ingredients, 1s. 6d.; hystericke water, 2s.; a purging bolus, 1s. 6d.; purging pills, 1s.; Gascan powder, 4s.; vermifuge pills, a box, 3s. 4d.; a purging bolus, 1s. 6d.; purging pills, 1s. cephalick drops, 2s. 6d.; an hysterick julep, 3s. 6d.; hysterick pills, 85, 6s. 8d.; a vomitive potion, 2s. 6d.; a stomattick cordial, 2s.; a cordial potion, 1s. 8d.; vomitive salts, 3 doses 1s 6d.; the hysterick julep, 3s. 6d.; Mithridate, 1s.; the vomitive potion, 2s. 6d.; vomitive salts 1s. 6d.; the hysterick pills, 6s. 8d.; the hysterick julep, 3s. 6d.; sal-armoniac, 6d.—2*l.* 17. 10." Spite of this drenching, to which he had subject himself, he lived to the age of 67.—*British Medical Journal.*

Experiments made by Drs. Rigner and Rickards on the effect of alcohol on men and animals, go to show that the temperature of the body falls nearly as fast after the use of alcohol in cases sufficient to produce intoxication, as after death itself. facility with which drunkards freeze to death, is explained by this fact. Dr. Jolly declares, that an increasing tendancy towards mental disease has been generated by the increasing consumption of spirits. Official reports show, that the abuse of alcohol accounts for one-fifth of the insanity in France.—*Med. Gazette.*

New Treatment for Tænia.—A novel method of expelling tape-worm is adopted by Dr. Lortet. While recognizing the value of oil of male fern, and other anthelmintics, he is, nevertheless, looking after something better to give in those intractable cases in which the usual remedies may have been vainly used. Dr. Lortet has administered, in a few cases, sulphuric ether, which acts upon the worm as it does upon man, that is, renders it insensible. Shortly after the exhibition of the ether, a mild purgative is given. The plan is to give five drachms of ether at a dose, and to follow it in two hours by an ounce of castor oil. The worm is discharged without causing pain, entire or almost so, and always with the cephalic end intact. Though but few patients have been subjected to this treatment, yet its uniform success, even in two instances where other means had failed, renders it worthy of notice.—*Pacific Med. & Surg. Jour.*

LONG ISLAND COLLEGE HOSPITAL

BROOKLYN, N. Y.

FACULTY.

Austin Flint, M.D., Prof. of Clinical Medicine.
Frank H. Hamilton, M.D., Prof. of Principles and Practice of Surgery, Fractures and Dislocations, and Military Surgery.
DeWitt C. Enos, M.D., Prof. of Operative and Clinical Surgery.
Austin Flint, Jr., M.D., Prof. of Physiology and Microscopic Anatomy.
Darwin G. Eaton, M.D., Professor of Chemistry and Toxicology.
Wm. Gilfillan, M.D., Professor of Surgical Anatomy.
Samuel G. Armor, M.D., Prof. of Principles and Practice of Medicine and Materia Medica.
Corydon L. Ford, M.D., Professor of Anatomy.
Foster Swift, M.D., Prof. of Obstetrics and Diseases of Women and Children.

The Ninth Regular Term of Lectures will commence in the Hospital buildings, corner of Henry and Pacific Streets, on the 1st of March, 1868, and end in July. For circulars and information, in reference to the College, address T. L. Mason, M.D., President, 120 Joralemon Street, or W. H. Dudley, M.D., Registrar, 201 Henry Street.

FEES:

Professors Tickets,	$140
Matriculation,	5
Dissecting,	10
Graduating,	25
Hospitals,	FREE

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S. T. HINCKLEY, Agent, 104 State Street, Chicago.

THE

CHICAGO MEDICAL EXAMINER.

N. S. DAVIS, M.D., Editor.

VOL. IX. FEBRUARY, 1868. NO. 2.

Original Contributions.

ARTICLE IV.

RESULT OF OPERATION FOR HARELIP.

By S. D. MERCER, M.D, Omaha, Nebraska.

Miss Harriet L., *æt.* 30, of Omaha, consulted me last March, concerning an operation which she said had been frequently declined, owing to the condition of her general health and the extent of the cleft. For several years she had been troubled with dyspepsia, depending upon inefficient mastication, and from the resulting debility, the lungs had become so irritable that the exhibition of an anæsthetic was very difficult.

The above cut represents a deep cleft, of the most unsightly

character, rendering the patient an object of disgust to herself and all around her. The chasm extended through the superior maxillary its whole length, the palate bones, and the soft palate, forming a perfect communication between the mouth and left nares. The left side of the nose was very much flattened by contraction of the tissue to the left of the chasm to which the left ala was attached.

By the assistance of Drs. Babcock and Canfield, the patient was partially anæsthetized, and, with the bone forceps, the side of both superior maxillaries bordering on the cleft was removed, the edges of the soft parts pared, an incision made from the septum nari to the base of the right ala, and thence about one-half inch toward the external canthus of the right eye, and another from the base of the left ala toward the external canthus of the left eye. Both sides were then freely dissected up, and the margins united with three pins. The wound united, partly by first intention, but some traumatic erysipelas occurred, followed by very slight suppuration, but the union was subsequently completed by second intention.

The food was subsequently masticated better, and, consequently, the dyspeptic symptoms are gradually disappearing. The patient was referred to the dentist for further improvement.

ARTICLE V.

CHLOROFORM IN INTERMITTENT FEVER.

BELLEFONTAINE, Iowa, Dec. 19th, 1867.

PROFESSOR N. S. DAVIS,

Dear Sir:—In glancing over some back numbers of the MEDICAL EXAMINER, my attention was attracted by an article on the use of chloroform in intermittents, from the pen of Dr. George F. Brickett, of Chicago. The result of the Dr.'s experience is so different from mine, that I have thought proper to drop you a few lines on the subject.

Practising in a country watered by the Des Moines and its

numerous tributaries, I have had, during my residence here, ample opportunity to witness malarious disease in all its various phases, from the simple tertian to the most malignant typho-malarial fever, in consequence of which few medicinal agents recommended for this class of disease have escaped my attention. The most remarkable feature of Dr. Brickett's cases was their prompt recovery without the use of the salts of quinia or their succedaneum. I would not be understood to cast the remotest suspicion on the truth of that gentleman's statement; but, on the contrary, I believe his article to be a plain statement of facts, confirmed by the observation of others; but with me the result has been different. During the past summer and autumn, I have administered chloroform, and carefully noted its effect, in upwards of fifty cases of ague, with the following results: in twenty cases, after the administration of one fluid drachm each, the chill was immediately arrested, with the exception of one case, in which the above dose was repeated in one hour; in eleven of the above cases, the febrile stage was probably abridged; of the remaining cases, the fever ran about as usual, all, with few exceptions, terminating in profuse perspiration; in eight of the cases, the paroxysm returned on the succeeding day, and nine on the second day, and three escaped, but were subsequently attacked in from seven to twenty days; of the remaining cases, no reliance was placed in the curative properties of the chloroform (which I only administered for the purpose of abridging the chill), but was followed by large doses of sul. quinia as soon as the sweating stage was established.

In conclusion, allowing my experience to be the guide, I would say that chloroform is a valuable and safe hypnotic; administered in doses of one fluid drachm, in the cold stage of an intermittent, it will never fail to arrest the chill in from ten to fifteen minutes, the patient falling into a refreshing slumber, as described by Dr. Brickett. Exceptionally, the above dose may have to be repeated in from one-half to one hour, but never oftener, and should never be administered where much nausea exists, for it will frequently produce the most distressing vomiting, the fumes of the chloroform regurgitating through the

mouth and nostrils, almost threatening the patient with suffocation. I administered the chloroform undiluted, following immediately with cold water. Very truly, etc.,

D. SCOTT.

ARTICLE VI.

REPORT OF THE PHYSICIAN TO THE WASHINGTONIAN HOME OF CHICAGO FOR 1867.

To the Executive Committee of the Washingtonian Home,

GENTLEMEN:—I hereby beg leave to submit my Annual Report, as Physician of the Home, for the year ending December 31st, 1867:

There have been 45 cases of delirium tremens treated during the year, out of which only 21 have required active medical treatment. Many others have had no delirium tremens, but have suffered from various other morbid conditions consequent upon the use of alcoholic stimulants, such as paralysis, dropsy (general and local), uræmia, and one case of mental disorder amounting to insanity. This case was discharged as incurable, and is one of uncommon interest.

There has been but one death during the year, that of Joseph Cunningham, who has an interesting history, which will be related by the Superintendent. He was admitted on the 27th day of June, in the active stage of delirium tremens, and died on the 30th, from uræmic convulsions. There was suppression of urine from the day of his admission, and partial suppression for some time previous. His eyes were congested; the entire surface of the body presented a bloated appearance, amounting to anasarca or general dropsy of the cellular tissue; he was raving and wakeful, and all the means I could employ failed to procure sleep or rest; he could not, or would not, take nourishment, and died a most horrible death in convulsions.

The next day after, a *post mortem* examination was made by Dr. H. M. Lyman and myself, in the presence of a large number of the inmates of the Home, who were permitted to witness

the examination, that they might, with their own eyes, see the destructive effects of alcohol on the human system, which, in our opinion, although silent, was a most impressive *lecture.*

The heart was found to be large, its walls thin and soft; an unusual amount of serum was found in the pericardium and pleura; the lungs were engorged with blood; the liver was found enlarged, nodulated, and friable, being easily broken down or torn, presenting the appearance of what is called a "*whiskey liver;*" the stomach was partially filled with a dark grumous fluid; but the most interesting feature of the case was, that the mucous membrane was highly inflamed and softened, presenting the characteristic appearances of a drunkard's stomach, as given by Dr. Sewell, in his plates showing the condition of this membrane, from the moderate drinker to the confirmed drunkard. This stomach corresponded most perfectly with that of the confirmed drunkard. The stomach was presented to Dr. N. S. Davis, a member of your Committee. The kidneys were found changed in their structure by what is called fatty degeneration, so that they were unable to perform their natural functions, hence, the retention in the blood of the poisonous elements of the urine, which acted as a direct poison on the brain, resulting in convulsions and death.

We regarded his case as incurable at the time of his admission. He had good care and close attention. A number of similar cases have been treated at the Home during the year, but have recovered, though none had progressed so far as his.

Another case is worthy of special mention, that of J. F., who had no delirium tremens, but suffered from general dropsy, caused from an impoverished condition of the blood. A large amount of serum was effused into the pleural and pericardial cavities, and a general anasarcal condition of the cellular tissue. He was kept quiet; tonics, iron, and diuretics were given, together with a nourishing diet, and his recovery was rapid and permanent.

The general treatment in cases of delirium tremens has been mainly the same as last year. Patients, on admission, have been bathed and kept clean. If constipation existed, as it gen-

erally does, a mild cathartic or laxative was administered. The urinary secretions were carefully watched, believing, as we do, that much of the nervous disturbance is caused by retention in the blood of the poisonous elements of the urine. To relieve restlessness and sleeplessness, we have found the bromide of potassium, in doses varying from 10 to 40 grains every three hours, the most generally applicable and effectual. One patient, who had had many sieges of delirium tremens, was so promptly relieved by this medicine, that he exclaimed, "that is the best medicine in the world, there was never such another." Chloroform, opium, opium and quinia, lupulin, digitalis, etc., etc., were occasionally used, and other remedies, as complications, which will always arise, seemed to indicate.

No alcoholic or kindred stimulants have been allowed at the Home. All stimulants have been withdrawn at once, and you will see, by the small amount of deaths compared with the whole number treated, gives a very flattering success. Notwithstanding there are many who recommend the "tapering off plan," I am prepared to assert my convictions that the "sudden jerk plan," as termed by the *Cincinnati Daily Commercial*, is the most successful, and should be adopted by all institutions designed for the reformation of inebriates.

I am happy to report that the sanitary condition of the Home has been much improved over the preceding year. Good sewerage, which was deficient last year, is now complete. Better accommodations have been provided for the sick, and better and more faithful care and attention given the patients. The Hospital Department has been materially enlarged, and better ventilation secured.

The matter of furnishing employment for the convalescents and fully recovered inmates, as suggested in my last annual report, and as provided for in our new constitution (or charter), has been referred to a committee, with power to act in the adoption of such employments as shall at once be profitable for the Home and conducive to the health of the inmates. All of which is respectfully submitted.

T. D. FITCH, M.D., *Physician.*

The Clinique.

CLINICAL CASES FROM MY NOTE-BOOK.

Neuralgia of the Rectum.—False Pains in the Uterus.—Effects of Belladonna.

By N. S. DAVIS, M.D., Professor of Practical and Clinical Medicine, in Chicago Medical College.

Case I. Mr. M., a laborer, residing on Sebor Street, was attacked rather suddenly with severe pain in the rectum, while at his work, June 10th, 1863. I was called to see him on the following day, when I found him in bed, with no fever, only slight quickening of the pulse, no coating on the tongue, and temperature natural, but suffering excruciating pain in the rectum. It was accompanied by no tenesmus or straining at stool, and no outward swelling. The interior of the rectum was very sensitive to the touch, but there were no hemorrhoidal tumors within reach of the finger, and no point of hardness and swelling, such as would indicate cellular inflammation tending to the formation of an abscess. Such acts as coughing, straining, or passing of wind from the rectum, rendered the pain more severe.

The patient was directed to remain at rest, and take eight grains of Dover's powder every three hours until the pain was relieved. The next day, I found him still suffering from the pain, unchanged, with the addition of nausea and moderate dysuria. I now directed warm narcotic fomentations to the perineum and hypogastrium, and, instead of the Dover's powder, gave sulphate of morphia, one-third of a grain, with bicarbonate of soda, five grains, every four hours. The following day, I found him still suffering paroxysms of extreme pain in the same locality as before, with extreme nausea and efforts at vomiting, cool extremities, and great sense of prostration. Being satisfied that most of the nausea and prostration was occasioned by the opiates, I omitted their further use and directed the following treatment:

℞. Nitrous Ether,---------- ℥ij.
Tinct. Belladonna,---------- ℥ij.

Mix, and give a teaspoonful in sweetened water every 4 hours.

Also twenty drops of tincture of belladonna in half a teacupful of milk-warm water, to be used as an enema, and repeated every three or four hours until the pain was relieved, or the pupils became dilated from the effects of the belladonna. This treatment was followed by very prompt relief to both the nausea and the pain. Only two enemas were used, and after the belladonna and nitrous ether had been continued two days, no further treatment was required.

Case II. Mr. H., a young man, of good habits but nervous temperament, the night after having sat on the damp ground, was attacked with extreme paroxysmal pains in the rectum, with tenderness to pressure at the lower end of the coccyx, but no swelling or redness.

The intestinal evacuations had been previously regular, and there was present no decided febrile disturbance of the system. Any motion of the body by which the rectum was disturbed, such as coughing or the passage of wind from the bowels, greatly aggravated the pain. The local tenderness near the lower end of the coccyx, led me to regard the case, at first, as one of cellular inflammation, such as usually results in the formation of an abscess, afterwards followed by a fistula. I consequently enjoined rest, narcotic fomentations to the anus, and gave pulv. Doveri internally, to procure sleep. After pursuing this treatment for two days, without any decided change in the symptoms, I caused the bowels to be moved by a saline cathartic, the operation of which was accompanied by severe rectal pains, and followed by no relief to the patient. Enemas, containing tincture of opium, were used after the bowels had been evacuated, but afforded partial relief only so long as their effects were sufficient to stupefy the patient. After the patient had been under treatment three full days, finding the pain and morbid sensitiveness of the rectum nearly the same as at first, and yet no point of swelling and hardness in the vicinity of the anus, such as always indicates the approach of an abscess, I

became satisfied that the case was one of neuralgia, and directed the following treatment:

℞. Chloroform, ---------- ℥iij.
Tinct. Belladonna, ---------- ℥iij.
Syrup of Orange Peel, ---------- ℥iij.

Mix, and take a teaspoonful every two hours, until the pupils become slightly dilated, when the interval between the doses should be increased to four hours.

He was also directed to have 20 drops of the tincture of belladonna in half a teacupful of warm water injected into the rectum each morning and evening. Under this treatment, the pain almost entirely subsided during the first twenty-four hours, and in three days the patient was able to leave the house, quite well. In two other cases, of similar character, relief was speedily obtained by the internal use of an equal mixture of tinct. belladonna and tinct. gelsemium, taken in doses of 20 drops every two or three hours.

Case III. Mrs. H., aged 35 years, of a nervous temperament and somewhat scrofulous diathesis, six months advanced in pregnancy, was attacked with severe paroxysmal pains in the rectum, which were accompanied by a disposition to force down, as in the pains of labor. She had been subject to annoyance from hemorrhoids, at times, for several years, and a tendency to constipation. But neither of these existed at that time sufficiently to account for the pains then existing. The following day, the pain in the rectum increased, and the "bearing down" became so regularly paroxysmal and severe, that the patient was induced to think that premature labor was actually taking place, and I was called in.

On making a vaginal examination, the os uteri was found undilated and firm, but the forcing pains that came every five minutes plainly crowded the whole uterus down lower in the cavity of the pelvis and caused a perceptibly increased rigidity of its neck. After a few hours delay, finding no change in the condition of the uterus, and the pains in the rectum increasing to a degree of great intensity, I became satisfied that there were no true labor pains, but the whole amount of suffering was

occasioned by neuralgia or, at least, nervous irritation of the pelvic viscera. Knowing, from previous attendance upon the patient, that the exhibition of any of the ordinary preparations of opium would be speedily followed by persistent nausea and distressing vomiting, even when taken into the rectum, I at once prescribed an equal mixture of tincture of belladonna and tincture of gelsemium, of which 20 minims was to be taken every two hours, and 20 minims in two ounces of slightly warm water to be used as an enema. In less than two hours the pains were greatly lessened, and in six hours both pains and tenderness or morbid sensibility over the lower part of the abdomen and region of the rectum had entirely disappeared. But the belladonna had caused some dryness of the fauces, and sufficient dilatation of the pupils to cause some confusion of vision. The doses were now reduced to 15 minims, and given at intervals of four hours.

The following day, finding the patient free from pain, but feeble and entirely without appetite, I directed for her 8 minims of hydrochloric acid, to be taken in a tablespoonful of sweetened water four times a-day, instead of the belladonna and gelsemium, but to repeat the enema of warm water and belladonna whenever the pelvic or rectal pains should return. The acid had a good effect on the appetite and digestion, and the enema was required but two or three times during the succeeding three days. In the meantime, the contents of the bowels were evacuated naturally, and the patient passed the remainder of her period of gestation with but little trouble, and was confined at the proper time.

Knowing the influence of belladonna in relaxing the os uteri when it remains rigid after labor has commenced at the full period of pregnancy, I hesitated in regard to the propriety of using it in the foregoing case at the sixth month, lest it should increase the danger of a premature labor. The result, however, showed that my fears were not well founded.

Proceedings of Societies.

ADAMS COUNTY MEDICAL SOCIETY.

The regular Quarterly Meeting of the Adams County Medical Society was held at the office of Dr. Robbins, Quincy, Ill., November 11, 1867, at 1½ o'clock P.M. The President, Dr. Louis Watson, in the chair.

Present.—Drs. Watson, Stahl, Cox, Helms, Kendall, Martin, Bassett, Bartlett, Ralston, Leach, Bane, Landon, Bonney, Wilson, and Robbins.

The minutes of the last Quarterly Meeting were read and approved.

Dr. Julius Guënther was proposed for membership by Dr. Wilson, and the proposition referred to the Censors.

On motion of Dr. Robbins, the Committee appointed, at the last Quarterly Meeting, to reïnvestigate the charges against Dr. Bassett and report at the next Annual Meeting, had leave to report at this meeting, and reported as follows:

"*To the Adams County Medical Society:*

"Your Committee, appointed at the Quarterly Meeting in August last, to reïnvestigate the charges against Dr. M. F. Bassett, which were heard and acted upon at the Annual Meeting, in May, 1867, beg leave to report that they have had the subject under consideration.

"Dr. Bassett appeared before the Committee and made a statement of the facts relating to the course which was made the basis of the charges, which statement is substantially embraced in the communication herewith presented and made a part of this report.

"Your Committee are satisfied that Dr. Bassett did not intend to set at defiance the Code of Ethics of the American Medical Association, which has been adopted as a part of the By-Laws of this Society; that if an unprofessional use was made of the circular letter which he designed for the medical profession alone, it was without his knowledge or consent, and

to his deep regret; that he regrets that such a construction should have been put upon his letter, or his course, as to compromise, in any mind, the honor or dignity of the Adams County Medical Society, or the profession it represents; that, in view of the fact that the benefits which he hoped and believed would accrue to the profession and to suffering humanity may have been more than counterbalanced by the disaffection resulting from such misapprehension of his purpose and motives, he regrets that the circular letter was issued.

"The high moral and professional standing which Dr. Bassett had maintained since he became identified with this Society forbids, among those who know him best, the suspicion that he would be guilty of intentional quackery. From the frank and manly statements of Dr. Bassett, his bearing in our presence, and the uniformly scrupulous regard for the amenities and ethics of the profession which has ever characterized his professional intercourse with the various members of the Committee, we feel warranted in saying that there can be no doubt of his desire and intention to pursue such a course, hereafter, as shall give his professional brethren no occasion to feel either aggrieved or offended.

"We believe therefore, that professional harmony will be best maintained, and the dignity and honor of this Society and of the profession at large sufficiently vindicated, by meeting Dr. Bassett in the same spirit in which he has met your Committee. Respectfully submitted.

"I. T. Wilson,
M. M. Bane,
J. W. Bartlett,
Joseph Robbins."

Appended, is the communication of Dr. Bassett, referred to above:

"Quincy, Ill., Nov. 9, 1867.

"Dr. I. T. Wilson—*Dear Sir:*—At your request, I have the honor to communicate to you, in writing, the substance of the remarks which I made, last evening, before the Committee of the Adams County Medical Society having under considera-

tion the charges pending against me, of having violated the Code of Ethics of the Society.

"It is a matter of serious regret that the course which was made the basis of those charges—including the publication of my circular letter to the profession, and the contents of the letter itself—should have subjected me to the suspicion of an intention to violate the ethics or compromise the dignity of the medical profession. While pursuing that course, I conscientiously endeavored to keep within the bounds of professional usage—never losing sight of my responsibility as a professional man—and if I transcended those bounds it was not my intention to do so. If an unprofessional use was made of my letter, it was without my consent and contrary to my wishes, and no one can regret it more than myself. My judgment approved the course which I pursued, but could I have foreseen that my motives would be misapprehended, and my professional brethren compromised by it, I should have avoided it.

"Respectfully, M. F. BASSETT."

One member of the Committee, Dr. Ralston, dissented from the report of the majority.

The report was received, and, on motion of Dr. Wilson, the case was dismissed by the following vote:

Ayes—Drs. Watson, Bartlett, Wilson, Robbins, Kendall, Helms, Cox, Bane, Landon, Bonney, Leach, Martin—12.

Nays—Ralston, Stahl—2.

The Censors reported Dr. Julius Guënther as having graduated at the New Orleans School of Medicine, his diploma bearing date April 15, 1857, and recommended his admission. On motion, he was regularly elected to membership.

Dr. Robbins proposed Dr. E. W. Goodwin for membership, which proposition was referred to the Censors.

The reading of essays being next in order, Dr. Landon, of Burton, read a highly interesting paper on the "Treatment of Acute Pneumonia." After some remarks on the paper by Dr. Ralston, and on his motion, Dr. Landon received the thanks of the Society for his essay.

Dr. Wilson, whose appointment as essayist was continued at the last Quarterly Meeting, was excused from further duty in that capacity, as he stated that the paper, which he then had prepared but was prevented by indisposition from reading, would have lost its interest, because the time had passed by when it was applicable.

Dr. Landon reported, verbally, three cases of paralysis complicating intermittent fever, in two of which the paralysis seemed to take the place of the agueish paroxysm, coming on in both cases at the time when the chill should have been expected. In the first case—hemiplegia—the paralysis still continues, after a lapse of two years. In the second—paraplegia—the patient recovered the use of his limbs in about six weeks, and at the time when the malarial cachexia seemed to be entirely removed. In the third case—hemiplegia—the paralysis followed a convulsion occurring during the first paroxysm of ague, and still continues. In all the cases the chills were easily interrupted.

Dr. Watson suggested that these might be cases of cerebro-spinal meningitis, which, as he had observed it, was generally attended with chills, though the periodicity was apt to be irregular.

Dr. Kendall regarded them as cases of congestion of the spinal cord, which might occur in intermittent, as in any other form of fever; and believed that cerebro-spinal meningitis was not a new or distinct disease, but a complication of fever, generally typhus.

Dr. Leach thought that Dr. Landon could not have been mistaken in his diagnosis. Like himself, Dr. Landon had encountered an epidemic of cerebro-spinal meningitis, in the same locality, and understood its characteristic features.

Dr. Stahl asked permission to withdraw from membership in the Society, saying that he had abandoned the practice of Medicine, and had no intention of resuming it; that he had ceased to read medical books, and did not feel like participating longer in the active business of the Society.

On motion of Dr. Ralston, Dr. Stahl was unanimously requested to retain his membership.

Dr. Stahl thanked the Society in a feeling manner for their kindness, but said that, for the reasons he had given, he felt that the time had come when he should lay off the harness.

Accordingly, on motion of Dr. Wilson, permission was granted him to withdraw.

The Society proceeded to the consideration of the charge preferred against Dr. E. D. Helms, at the last Quarterly Meeting, of having violated Article VIII of the By-Laws, by joining the so-called Quincy Medical Society, made up, in part, of expelled members of the Adams County Medical Society. The charge was read, and the Secretary reported that he had served Dr. Helms with a copy thereof, as directed by the Society.

Dr. Helms, being present, admitted that he had joined the so-called Quincy Medical Society, but claimed that it was not an infraction of any rule of this Society.

It becoming apparent that a full hearing of the case would protract the session to an hour unseasonable for members residing out of the city, it was ordered, on motion of Dr. Bassett, that the case of Dr. Helms, together with the case of Dr. Baker, against whom similar charges were pending, be referred to the Annual Meeting in May.

It was ordered that the proceedings of this meeting be published in the Chicago Medical Examiner and *Chicago Medical Journal.* Adjourned.

JOSEPH ROBBINS, M.D., *Sec'y.*

Selections.

LETTER FROM PARIS.

Paris, *November 24th, 1867.*

The *Bulletin de Therapeutique* has contained in its three last numbers an extremely judicious essay on

DELIVERY OF THE AFTER-BIRTH

in cases of miscarriage, of which it is worth while to give you an abstract. Dr. Gueniot, the author, observes that among other differences between a miscarriage and a regular labor, it is noticeable that in the former, the expulsion of the fœtus and detachment of the placenta begin to take place at the same time, instead of constituting two orders of phenomena essentially distinct, as in the latter case. Hence in abortion, hemorrhage is associated with the uterine contractions, throughout their entire duration.

On the other hand, the *complete* separation of the placenta is tardy of accomplishment, since the adherences are relatively more solid during the first months of gestation, and the contracting power of the uterus little developed. Moreover, even when the placenta be entirely detached from the uterus, the length and firmness of the neck of the womb opposes unusual obstacles to the expulsion of the after-birth. In view of all these considerations, it is easy to see that the danger of miscarriage belongs, not to the movement of the expulsion of the fœtus, which is usually unaccompanied by any difficulty, but to the separation and expulsion of the placenta. During this period, the patient is exposed to accidents resulting either from hemorrhage, or from retention and decomposition of the placental mass. Putrid infection, metritis, anemia, nervous exhaustion, shiverings, fever vomiting, dysuria, and various neuralgias may be expected in this connection. Finally, uterine phlebitis and metastatic abscesses may complicate a miscarriage, as in an unfortunate patient observed by Dr. Gueniot at the maternité.

The therapeutic problem suggested by the consideration of these possibilities, consists in determining the line of conduct required in different cases of miscarriages, to favor the complete repulsion of the placenta and its membranes, and to combat the various accidents which may have been determined by their retention. The necessities of the case vary greatly, according to the period of gestation, at which the miscarriage has taken place. During the first two months, if the placenta be not expelled together with the embryon, its spontaneous delivery is extremely slow, and the process may be prolonged two days, without entailing any danger upon the patient. Until, therefore, the period has elapsed, the physician is not called upon to interfere, unless in case of accident.

During the third and fourth month, the membranes are ordinarily ruptured at any early stage of the labor, before the placenta be completely detached, or the os sufficiently dilated. On this account, the placenta is expelled after the fœtus; but

the limit of safety in the delay must be shortened to twenty-four hours. Finally, in the fifth and sixth months, so much greater facilities exist for the expulsion of the after-birth, that its retention must be considered abnormal if it last more than twelve hours for the fifth, or six for the sixth month.

The precision of these limits is of the utmost importance, as then it affords the physician the first indications for deciding whether to intervene with the resources of art, or permit nature to take its course.

The author then classifies abortion into five types:

1st. The abortion has taken place, the delivery of the placenta has not, or it is incomplete, and no accident has occurred.

2d. Same situation as the above, but complicated by accidents.

3d. Abortion is complete, but the physician is in doubt whether the placenta be expelled or not.

4th. Fœtus and placenta had both been expelled, but accidents have occurred claiming intervention.

5th. Finally, abortion has not yet occurred, but it is recognized to be inevitable.

In the first case, as soon as the time fixed for the normal expulsion of the placenta has been overpassed, the physician has reason to *certainly* anticipate accidents, even if they have not already occurred. Moreover, the divers methods of intervention will become difficult of employment with every moment of delay, consequently, the indications for prompt interference are sufficiently pressing. On the other hand, this interference is always accompanied by certain dangers, and the decision for action or inaction, must in each case be based on a special comparison between present inconveniencies and future perils. It is certain, in all cases, that immunity from accident during several days retention of the placenta can only be observed when it has remained nearly completely adherent; as soon as it begins to separate, it is liable to putrefy.

The danger varies, moreover, according to the different periods already described. In the first, the small development of the uterine vessels saves the patient from the chance of dangerous hemorrhage, and the small size of the placenta renders its putrefaction a matter of less consequence. Hence chills, fevers, a certain pallor of the face, diarrhœa, and dryness of the tongue, are generally the greatest accidents to which the patient is exposed. Consequently, in view of the various inconveniences of active intervention, it is better for the physi-

cian to restrain his efforts to vigilant surveillance, in all cases of retention of the placenta after abortion, occurring in the two first months of gestation.

During the second period of gestation, the hemorrhage, though much more abundant, can still be readily mastered, by means of the vaginal tampon. But, after expulsion of the fœtus, the os contracts promptly, and speedily opposes a serious obstacle to the natural or artificial delivery of the placenta. A considerable mass is retained to putrefy, and may occasion a mortal infection. Hence the indication is urgent to deliver the woman artificially, as soon as possible, after twenty-four hours have elapsed without spontaneous delivery.

M. Gueniot then reviews the various agents proposed for effecting this delivery. He rejects traction on the umbilical cord, on account of its fragility. He admits that the index finger may occasionally be employed, but it is necessary the uterine neck be sufficiently open to give free passage to the finger, that the vagina permit the entrance of the hand, to the close vicinity of the os; finally, that it be possible to separate the placenta *en masse.*

The first condition is extremely rare a few hours after abortion, and never exists after several days. The realization of the second occasions great pain, and exposes the patient to contusions and lacerations. Finally, the third, the most important of all, is necessarily problematic. Hence the finger is to be regarded as a precarious resource. Pincers, curettes, hooks, are all more or less dangerous. Intra-uterine injections can only be employed with a return-current, which greatly diminishes their efficacy.

Having thus reviewed these various agents, M. Gueniot excludes them all in favor of three, upon which he places immense reliance, the prepared sponge, the uterine dilator, and the ergot of rye.

The dilator, you know, consists of a small India-rubber bag, introduced into the uterine cavity in a collapsed form, and then filled out with warm water. This, in virtue of a continued irritation produced on the internal sphincter, provokes uterine contractions nearly inevitably at the end of several hours. The bag constitutes an artificial substitute for the natural membranes that have been prematurely ruptured, and its action imitates nature as closely as possible. Not only provokes uterine contractions, but it mechanically enlarges the os, and, moreover, performs the office of a tampon in moderating the hemorrhage. For this last purpose, however, the caoutchouc bag is no more

infallible than the embryonic mass itself. M. Gueniot considers the dilator one of the most precious means for provoking the delivery of the placenta.

Where the prepared sponge is inserted in the uterine neck, it is recommended to accompany it by a vaginal tampon, as better security against hemorrhage.

Finally, ergot may be administered in doses of two grammes, (thirty-two grains,) and on M. Gueniot's testimony, is certain to determine uterine contractions in from twelve to eighteen hours. If the action is not sufficiently marked after the first dose, sixty centigrammes more may be given, which generally determines a prompt separation of the placenta, and its expulsion through the os.

Sometimes, unfortunately, the ergot occasions a tetanic constriction of the neck, and complete imprisonment of the placenta. This accident, however, rarely occurs during the first half of gestation. On the other hand, a uterus exhausted by long continued labor, is peculiarly liable to ergotic tetanus. The accident must be combated by baths, emollients, and narcotics. Since ergot alone does not prevent hemorrhage, a tampon must always be at hand, to provide against this latter exigency.

M. Gueniot ranks the foregoing agents in the order in which I have specified them; and considers the use of the finger, or of intra-uterine injections as ultimate resources, to be appealed to only when others fail.

In abortions of the fifth and sixth month, the accidents provoked by the retention of the placenta are nearly as formidable as at term. In this case, the dilatability of the vagina and of the os enables the placenta to be directly extracted by the hand, and this proceeding is indicated as soon as the delay of twelve or six hours has been overpassed.

In the second class referred to above, where accidents exist, these demand attention before everything else. Whether the normal delay be accomplished or not, it is incumbent on the physician to intervene in the artificial extraction of the placenta as soon as abundant hemorrhage or signs of purulent injection are manifested.

If the placenta be only partly engorged in the os, and its principal portion be retained above the internal sphincter, it is better to have recourse to ergot than to traction, which may tear the mass. In case of hemorrhage, ergot should be employed conjointly with the tampon. In case of purulent infection, ergot and intra-uterine injections, with internal tonics.

Ergot should not be employed if the purulent infection dates from several days, as, in that case, the uterus may be considered to be stupefied and paralyzed.

In the third case, the doubt concerning the expulsion of the placenta will be removed if accidents occur, or if, after prolonged waiting and repeated examinations, there is no accident.

In the fourth case, since by the supposition the accidents are supposed to exist *after* the expulsion of the placenta, this treatment becomes a problem of general therapeutics.

In the fifth case, as soon as the miscarriage is recognized to be inevitable, the physician should endeavor to favor its accomplishment.

SPONGE-PESSARIES.

The distinguished physician, Guendan de Mussy, also contributes a note to the *Bulletin*, on the use of sponge-pessaries, of which he highly approves. He remarks that a reaction has taken place against the exaggerated ideas of physicians some years ago, who regarded all deviations and flexions of the uterus as pathological conditions requiring active medical intervention. But the reaction has carried opinion as much too far the other way, and it is too often ignored, these anomalous positions may seriously derange the circulation, or, in predisposed patients, determine all sorts of sympathetic nervous affections. The pessary comforts the patient, and if it does not cure the disease, at least puts the organ into favorable conditions. Where the uterus is conical, the sponge should be depressed in the middle, like a mushroom, to receive the neck. In cases of retroflexion, the sponge should be spread out in a fan-shaped form, having a central prominence to support the *museau de tanche*, while the limb of the fan sustains the *cul-de-sac*.

It is recommended to coat the lower third of the sponge with yellow-wax, to render it impermeable to the urine. The wax should be melted, the sponge immersed in it, and allowed to cool, and again immersed, and so on until a thick coat be formed.

TREATMENT OF DYSENTERY.

Dr. Beaufort has presented several considerations on the treatment of dysentery, which disease he considers to be essentially allied, as to its cause, with intermittent fever. Both depend on the combination of heat and damp in the weather. If dampness is occasional, and heat intense and constant, inter-

mittent fever is produced; if the dampness is constant, and the heat liable to brusque variations, dysentery occurs. The common cause is the effluvia from decomposing vegetable matter. One of the first phenomena is congestion of the system of the portal vein, and relief of this congestion constitutes the ultimate therapeutic indication. In the treatment of dysentery, it is necessary, first, to empty the large intestine of altered and irritating mucus, by means of evacuants and absorbing alkalines, (chalk and subnitrate of bismuth;) second, coagulate sanguinolent and albuminoid matters on the surface of the intestine, by means of injections of neutral perchloride of iron, ten to twelve drops in half a lavement of warm water, repeated two or three times in the twenty-four hours. By this means the mucous membrane becomes protected and enabled to heal. Third, diminish congestions of the portal system, sometimes by leeches at the anus, but principally by the use of ipecacuanha, which acts as a stimulant to the vaso-motor system.

GANGRENE OF THE MOUTH.

Dr. Leavit reports a case of gangrene of the mouth occurring in a child of three years old, already affected with tuberculous enteritis, and which he succeeded in curing by the application of creosote in which camphor had been dissolved. The disease commenced with two ulcerations, round, hollow, white, which were situated in the gingivo-labial fold. Their contents were characteristic, grumulous, dry, and white. In twenty-four hours the ulcerations had greatly extended, were black at the periphery, grumulous at the centre, the mucous fold toward the nose was profoundly excavated, the gum superficially destroyed in an extent of fifteen millimetres, and a fistulous point existed under the lip. An odor of gangrene was exhaled. On this day, for the first time, three cauterizations were made with the camphorated creosote. The next day notable amelioration, inflammatory reaction. In the evening, cauterization with camphorated creosote diluted with alcohol. Two more powerful cauterizations and several with the diluted fluid were made subsequently, and ten days after the first, the cure was complete.

CROUP CURED BY TRACHEOTOMY.

At the Societé des Hopitaux on the séance of the 8th, M. Roger mentioned a case of croup cured by tracheotomy. Several days elapsed before the canula could be withdrawn, for the child immediately exhibited symptoms of suffocation as soon as the attempt was made. Recourse was at last had to Faradisa-

tion of the larynx, and from the day of the first application of electricity, the little patient was able to breathe without the canula during the day, if only it was replaced at night. The tube was not definitely withdrawn till a month after the operation.

At Hotel Dieu, M. Moissenet has had a case of membranous angina confined to the right tonsil. This organ was covered with a thick layer of membrane, having a fetid odor. The disease was overcome by applications of tincture of iodine.

M. Moissenet considers diphtheria less dangerous when it attacks the tonsil, than when it invades the soft palate.

Also at Hotel Dieu, M. Isambert, in speaking of a slight epidemic of small-pox that had occurred in his wards, took occasion to praise highly the use of repeated warm baths, which he did not fear to commence even during the period of the eruption. The warm bath, (given of course in the ward,) has the advantage of diminishing the burning heat of the skin, suppressing the inflammatory areola which surrounds the base of the papulæ, without hindering their suppuration. The cicatrization seems to be less deep and indelible. Emunction with mercurial ointment, was also found to be very useful in preventing cicatrices on the face, without occasioning the painful constriction determined by collodion.

At the Hospice des Incurables, recently died a patient affected with leurocythemia. At the autopsy, the spleen presented the following diameters. Vertical 32 centimetres, transversal 22, antero-posterior 19. It weighed two kilogrammes, its tissue was softened, and contained an infarctus. The liver also was hypertrophied. The kidneys the seat of fatty degeneration, although no albumen had been discovered in the urine. The heart was fatty, and the large vessels filled with clots. Some granulations existed on the mucous surface of the large intestine, and two infarctus in the duodenum.

M. Dumontpallier communicated a case of severe hiccup, which was finally cured by electricity. One pole of the battery was placed on the cervical vertebræ near the origin of the phrenic nerve, the other on the border of the cartilage of the last ribs towards its sternal extremity. Hardly had the current traversed the chest, when the patient uttered a loud cry, the hiccup became transformed into a sob, and ceased abruptly. It reappeared two hours afterwards, and yielded again to electricity, complete interval of nine days, then the hiccup reappeared during several hours, but this time was definitely cured by electrization.—*Med. and Surg. Reporter.*

INVERSION OF THE UTERUS.—NEW MODE OF REDUCTION.

By Dr. FESSENMAYER, of Altkirch.

The 29th December, 1863, I was called to a young woman, 20 years old, primaparous, delivered on that day, and subsequently having flooded considerably. I recognized by the touch a complete inversion of the uterus. The os tincæ, which bounded the summit of the vaginal tumor, was very close. Attempts at reduction were fruitless, and renewed the hemorrhage. Moreover, the volume of the uterus was too great for reduction through the os tincæ. I prescribed hemostatics and astringent injections.

A few days before, I had made use of an India-rubber ball as a tampon, for a case of partial adherence of the placenta to the cervix uteri. Labor commenced as usual, with a very abundant flow of blood. The inflated ball arrested the hemorrhage, at the same time promoting the contractions. The dilated neck allowed the introduction of the hand to detach the placenta and disengage the head, which was presenting. The numerous advantages offered in obstetrical practice by the inflated ball presented themselves to my mind, on returning home from my visit to this lady. I observed, also, that her perineum and fourchette were intact, and immediately conceived the idea of employing the rubber ball to attempt the reduction of the inverted uterus. I proposed this operation to the lady, making a delay of its trial for several weeks, that the uterus might become disgorged. It was six months before I had an opportunity to put in practice this plan of operation. The existence of uterine inversion was unknown to the midwife and the other wise heads of the neighborhood. I myself had only lived there six months, and public opinion was not favorable to me.

July 10th, 1863, she was brought to me in a carriage. Her features were greatly changed; she was very anæmic; her lower extremities were œdematous; a chronic bronchitis was wearing her out. From the vagina flowed a grayish sanies, profuse and fetid; her catamenia had scarcely an eight days' interval between periods. She was too weak to sit up, and they had to bring her from the carriage on a bed. On examination by the touch, I found the uterus inverted, very small, quite disgorged; the os tincæ was hard and flattened upon the neck.

As this woman lived several miles from my residence, I had to give my instructions to her father, and explained to him the results which I expected from the inflation of the tampon ball. The one I had was tolerably strong, and one could easily give it the volume of a child's head at the eighth month of intra-uterine life. I required the woman to bear a pressure slightly increased every day, so as to attain, at the end of several days, the above-mentioned volume. I prescribed emollient injections morning and evening, and advised her to remove the apparatus at stool and in urinating, if there was too much pressure.

On the morning of the ninth day, the father used rather more force than usual in distending the ball, and she suffered all day from colic and pains extending from the hypogastrium to the breast. She had the fortitude not to alter the apparatus, thinking that it was producing its effects, and her instincts did not fail her. About 4 P.M., the pains ceased, and the next day the father no longer found the tumor in the vagina. The introduction of the ball was, however, continued.

Three days after, 22d July, I visited my patient, who considered herself cured. The vaginal discharge was slight. By the touch I found the uterus in place; the finger still easily penetrated the neck, in the midst of which was distinctly felt a transverse ring, the size of the little finger. A fortnight subsequently, this little opening was still perceptible in the anterior and middle part of the neck, which besides was almost firm.

From the 20th July she began to mend. The catamenia appeared three weeks later, thenceforth always regular as before her marriage. The cough slowly abated. Pills of protiodide of iron contributed to the recovery, and the anæmia rapidly disappeared.

This new method of reducing an inverted uterus had sustained the proof of trial, and given success in a case where I dared not hope for it. But how would it answer in a recent case of inversion? The following observation allows me to state fortunately.

The 4th December, 1865, I was called to a lady delivered two days before. There had been profuse flooding. She had vomiting and a swollen abdomen. I found her very weak and anæmic. The abdomen was distended. In the hypogastrium there was a large tumor, which I took to be the bladder, from its elasticity. In endeavoring to confirm my diagnosis by vaginal examination, I was astonished to find a complete inversion of the uterus. I drew off, with the catheter, four *litres* of urine; I treated constipation with enemata and a laxative; and

postponed for several weeks attempts at reduction, by reason of the large volume of the uterus. One month later, I sent to her husband, not a tampon ball, for her perineum was impaired, but a large India-rubber pessary, with an inflater. This pessary presented a flat, horizontal portion, which gives a larger point of support when the perineum is ruptured.

After applying the apparatus and indicating the method of distending the pessary, I required the husband to act as in the preceding case. At the time treatment was begun, the uterus was engorged, but its volume was little greater than normal. She was always œdomatous, on account of excessive anæmia. Notwithstanding this unfavorable condition, toward the evening of the third day, as I had foreseen, she felt *strong pains extend from the lower abdomen toward the breast.* At the end of four hours they ceased, and the uterus was reduced.

The catamenia returned only on the 1st March. The 10th March, 1866, I could assure myself that the uterus was in its natural place and had recovered its normal volume. This woman was not confined to bed during treatment, as she was obliged to attend to household duties. An abundant serous discharge existed from delivery until the reduction of the uterus; from this time it entirely disappeared. She rapidly recovered, and her health soon became perfect.—*Gazette Medicale de Strasbourg.*

ARTIFICIAL PROCIDENTIA UTERI, AS A MEANS OF MORE EFFECTUAL TREATMENT OF CANCER OF THAT ORGAN.

By E. F. GORDON, M.D., Mobile, Ala.

In proposing such an extreme plan, I am aware that I am running counter to the experience of distinguished men, and to the present teachings of surgery and medicine.

Let us for a moment review the history of the course and treatment of cancer of the womb, as we ordinarily meet with it. We are summoned to take charge of these cases usually, when the pains, hemorrhages, and putrid discharges alarm our patients.

It is the fate of our laboring classes that, as their hardier frames bear pain better, we rarely see them until the disease is far advanced. The two forms of carcinoma, fibrous and encephaloid, are unfortunately common, and the latter strides on

with fearful rapidity. The epithelial, first described by Sir Charles Clark, as the cauliflower excrescence, pours out at an earlier period a profuse serous discharge, oftentimes acrid, but not at that stage offensive, and in this way, and from the fact of its slower march, is oftener seen by the physician while yet confined to the original cervix.

It is unnecessary here to enter into the pathology of this neoplasm. Whether it is, according to Chambers' view, a defect of vital force which equally predisposes to the deposition of tuberculous and cancerous matter, by degeneration of the blood, it is only too well known that its progress is always towards destruction.

Those of us who are in daily contact with this disease, are familiar with its loathsome train of symptoms, and with the inevitable result, sooner or later, but generally after two years of terrible suffering.

The standard authorities advise for treatment that we endeavor to improve the general health by bitter tonics, and to confine ourselves to allaying pain by anodynes, checking hemorrhages by astringents and the tampon, and keeping down offensive odors by chlorinated washes. In former times, starvation was occasionally practised, and an exclusive vegetable diet was recommended by Dr. Twitchell of New England, from the result of a case under his treatment, but I fear it only adds to the broken-down condition of the patient.

Internally, all the more powerful articles of the Materia Medica (arsenic hardly yet abandoned) have been tried and found wanting. Locally, the actual cautery, Vienna paste, chloride of zinc, chromic acid, bromine, and latterly the solvents of cancer cells, such as acetic, citric, and carbolic acids, have been, by turns, the favorite, but have failed in the end to justify the anticipations of their advocates. Excision of the cervix has been tried extensively by the French surgeons, and in a more restricted way by others. But the task is so hopeless, and so dark with painful forebodings, that we shudder when we are summoned to take charge of such a case, and to bid our patients, like the Third Richard, "despair and die."

It is with a desire of abridging such scenes as this, and, if possible, to place the uterus in a position where it can be daily inspected and rationally treated, that I have to propose the induction of procidentia by artificial means.

Is there anything in the anatomical relations of the uterus to forbid the effort? Bear with me while I condense a statement of these relations. This organ is attached to the bladder

and rectum by folds of the peritoneum, which are sometimes called the anterior and posterior ligaments. The peritoneum reflected upwards covers the anterior and posterior surfaces of the uterus enclosing the organ between two of its layers. These layers meet together at the sides of the uterus, and pass off to the lateral walls of the pelvic cavity, dividing the pelvis transversely.

In this way the peritoneum forms the principal part of the broad ligaments. The fibrous or muscular structure of the uterus itself also extends into these ligaments. They contain besides the Fallopian tubes, the ovaria, the round ligaments, with bloodvessels, nerves, and lymphatics. The round ligaments arise from the upper angles of the uterus in front of the Fallopian tubes. From this origin, each ligament passes to the inguinal ring, descends the inguinal canal, turning round the epigastric artery, and its fibres are inserted into, or are mixed with, the structures of the mons veneris. The length of the round ligaments is from four to five inches.

The external traverse fibres of the proper substance of the uterus are prolonged into the round ligaments, of which they form a constituent part. Some fibres of the internal oblique muscle also enter the lower part of the canal, and extending upwards, contribute to the formation of the ligament. The ovaria are connected with the uterus at the point of insertion of the Fallopian tubes by a fibro-cellular cord or ligament, prolonged from the proper substance of the uterus (Tyler Smith). The womb rests upon the upper end of the vagina, which encloses its cervical or neck portion, and keeps it up in its place, by means of its connection with the bladder in front and the rectum behind, and more than all, by two utero-sacral ligaments, which tie the upper ends of the vagina and womb to a certain place about an inch and a-half in front of the apex of the sacrum. As long as the utero-sacral ligaments remain in a healthy state, preserving by their tone a due length, the womb cannot fall downwards or prolapse, because the cervix, being enclosed within the upper end of the canal of the vagina, cannot move down unless the upper end of the vagina move down also. Prolapse pulls upon and stretches all the ligaments—the broad ligaments by far the most. The vagina suffers displacement proportionally with the prolapse. It is inverted, its walls being doubled upon themselves, and its cavity progressively shortened until it is entirely effaced.

This displacement is always in a direction corresponding with the axis of the vagina and different portions of the pelvis,

and follows the curve formed by the hollow of the sacrum and continued by the perineum (Byford). There is nothing then to prevent prolapsus of the uterus but the tonicity of the ligaments suspending it, and holding it from above, and the vagina supporting it from below. When the uterus is enlarged and presses down, and when the ligaments are relaxed and weakened by long-continued strain, or an impoverished condition of the system, prolapse is apt to occur *spontaneously.*

"Does the disease itself (cancer) change the parts so early as to make the effort dangerous?"

There is a singular unanimity among writers as to the part in which uterine cancer begins, and from which it extends itself. Prof. Rokitanski, of Vienna, whom Simpson pronounces "perhaps the most experienced and profound morbid anatomist of the present day," says, "carcinomatous induration generally limits itself to the vaginal portion and cervix, and very often in a defined and sharp manner." In another paragraph, he remarks, "the primitive seat of cancer is always the cervix uteri, and first of all and particularly the vaginal portion. The primary appearance of cancer in the fundus uteri is limited to so extremely rare cases, that what we have just said remains one of the *most fixed rules.* It forms," he adds, "in this respect, a contrast with fibrous and tuberculous tumors of the uterus."

"Uterine cancer," says Prof. Walshe, a very high authority, "is commonly primary, and possessed of comparatively slight tendency to contaminate the system generally." And again, "there can be no question that the womb ranks among those organs less prone than certain others, as, for instance, the mammæ and testes, to contaminate the distant viscera. Among thirty-seven females dying of uterine cancer, and examined by M. Ferrus, *seven* only exhibited secondary formations elsewhere." Scanzoni remarks, and his experience is worthy of attention, for he has tabulated one hundred and eight cases treated by himself in eight years: "Among all the parts of the uterus, it is almost exclusively the vaginal portion which is the starting point of the disease; in fact, although observations exist of cancers which are developed in the body, or near the summit of the uterus, while the neck was entirely untouched, or elsewhere, the infiltration was equally spread throughout the organ, such cases ought to be considered as rare exceptions."

The progress of the growth is very generally from the neck upwards, and from the interior of the cavity outwards. It struggles on in this way for perhaps six months on an average,

before the infiltrations extend to the vagina and peritoneum, and finally to the rectum, bladder, and inguinal glands. In younger persons, menstruation seems to hasten the development, but after its cessation, at the change of life, the advance is slower. It is plain then that we must limit our efforts to produce artificial procidentia to the early period of this disease, while yet the uterus is moveable, and before the peritoneum is involved, as we would risk producing intense peritonitis by tearing that membrane if diseased, besides the utter hopelessness of ultimate cure when the abdominal structures are already implicated.

At this stage, too, you avoid the hemorrhage incident to bruising the fungosities, which, at a later period, shoot from the neck. The cancroid or epithelial form presents the most hopeful aspect, from its later tendency to deep ulcerations and adhesions. Its character is well given by Virchow, who first recognized it in the list of papillary tumors. Mayes says it is not a cancer, but a peculiar excrescence of the female genital organs. At first, it is purely local and nowise constitutional, but after a time it assumes a cancerous character. The enlarged papillæ are covered with looped capillaries, which abundantly supply them with blood, and present that red strawberry appearance which bleeds on the slightest touch. Subsequently, cancroid deposits take place deeper among the muscular fibres and connective tissue. The scirrhus or fibrous comes next, and may, in a few instances, be seen early enough, but the encephaloid will be apt to have advanced so far as to baffle all our efforts, and to forbid the attempt to bring the organ down.

I proceed to the next point—the best plan of effecting procidentia. Two modes suggest themselves: one is to attach a wire to the cervix, by passing it around or through the latter, and by suspending a moderate weight to it, by which we may tire out the ligaments. This is open to the objection of being very slow and disagreeable, and confining the patient to the recumbent or sitting posture; and also that the wire might irritate or cut out if much traction was necessary. A gum-elastic cup and cord might be substituted, by which, the air being exhausted, a firm but slight pull could be kept up, without the inconvenience of the wire and weight.

The plan that seems to me most feasible, is to place the patient under the influence of chloroform, so as to obtain the double benefit of complete relaxation of the tissues, and the protection of the patient from the suffering and shock induced by the anæsthesia. By means of Museaux hooks, the uterus

can be pulled down gently, following the axis of the pelvis and vagina until it reaches the vulva. This can be repeated two or three times a week, watching the effect on the patient, and endeavoring at each trial to protrude it a little further. In two months we might hope to establish complete procidentia, and accustom the patient to it, so as to avoid the sinking and nausea attendant on the operation. Large doses of opium such, as are used after ovariotomy and in puerperal peritonitis, might be resorted to for the purpose of establishing toleration, after the prolapse was obtained.

Is extirpation of the cervix uteri necessarily dangerous?

It will be remembered that this operation was first suggested in modern times, and performed by Osiander, of Gottingen, about the year 1822, and that soon afterwards it was brought into vogue by Lesfranc, who reported ninety-nine cases, with a loss, I think, of only fourteen.

This was in a formal dissertation submitted to the French Academy.

It will also be borne in mind that M. Panly, who was an interne at La Pitié at the time, proves conclusively that these statistics are entirely unreliable, many of the cases having been reported twice under different names, and a large number dying between the first and fourth day. Again, he furnishes a list of nineteen cases in private practice, where, under the same operator, the mortality was nearly one-half.

This would seem to make against rather than in favor of the operation; but when we consider that, at that day, the diagnosis of cancer was very imperfect, and that the cases were operated on without any reference to the stage of the disease, it is only a matter of surprise that so many of them should have recovered.

It would seem that the operation had never attained any popularity in Great Britain until revived by Simpson, who reports eight cases, six of them successful, and only one proving fatal. Three of these cases cured were cancerous.

So far as regards the dangers of the operation, Simpson remarks, that he has not met with troublesome hemorrhage, although using only the bistoury and scissors, and that the shock which is described as being so fearful, by many writers, did not occur in any of his cases.

Chaissaignac, since the invention of his ecraseur, has again popularized the operation in France, and must have performed it many hundred times, extending its application to hypertrophies of the neck and even ordinary prolapsus.

By his instrument all danger of hemorrhage is removed, and by the use of chloroform the shock is much lessened or entirely obviated.

Dr. J. Braxton Hicks says, "he has operated or been present in more than twenty-eight cases, and has never seen any fatal result or any untoward symptom whatever."—*Guy's Hospital Reports.*

Any one who glances over the medical journals of late years, is struck with the frequency of this operation and how little danger is attached to it, and all the systematic treatises now recognize it as justifiable, not excepting Scanzoni, who is extremely conservative and cautious in recommending surgical interference.

In point of fact, Sims' favorite operation of bifurcating the cervix for the cure of dysmenorrhœa is quite as severe, the incisions being as extensive, though in an opposite direction. I may add, that he seems to fear hemorrhage more than most surgeons, tamponining with perchloride of iron to prevent it, and cautioning against its removal or any exercise for three or four days.

Can the uterus be removed without a fatal result?

I do not wish to dispute the assertion that it is one of the most dangerous operations in surgery to attempt its removal *in situ.*

Statistics conclusively prove that out of nineteen cases quoted by Breslau, two only had succeeded—Langenbeck's and Recamier's—Sauteis is mentioned by some authors as a third, although the patient died in a few weeks after of a colic. Blundell performed the operation three times, only once succeeding. His method of operating, by retroverting the organ and pulling it out by Douglas' cul-de-sac, seems to me the most feasible. I saw an uterus after it was extirpated by Dr. Paul Eve, then of Augusta, Ga., in 1850. The patient lived for several months afterwards, but died subsequently from a return of the cancer.

Dr. Storer, of Boston, removed, last year, a large tumor, containing the womb and appendages, from a patient who is represented to have made a good recovery. In such a case you have many of the same difficulties to be overcome and dangers to encounter as in ovariotomy.

Apart from the cases in which nature has done more than half of the duties of the operation, by precipitating the organ out of the vulva; by isolating it from the important parts with which it is in relation in the ordinary state; by having also prepared the way, by long habitude, for the void which the

absence of the uterus occasions in the pelvic cavity. Apart from these cases, in which the ablation is easy and little painful, *and attended with certain success*, the extirpation of the uterus constitutes one of the most frightful operations, even to the rashest surgeon, and is the most dangerous to the patient. This is the admission of Duparcque, while denouncing the operation, and is well worthy of our attention. For if spontaneous procidentia deprives this most terrible ordeal of all danger, then we ought to imitate Nature's plan of effecting such a displacement preparatory to the removal of the womb. Women have been known to cut off the prolapsed womb with an ordinary knife, and many surgeons have amputated the organ, to relieve patients from the inconvenience of the dragging and discharges, especially after inversion. Sims reports such a case in his late book, and Dr. Choppin, of New Orleans, relates a case of prolapsus in the February Number of the *Southern Journal of Medical Sciences*, cured by ablation. He jestingly remarks that the woman was afterwards presented to the Class "with her womb in her hand," thus demonstrating that the uterus could be removed without causing death.

The advantages, then, of treating uterine cancer by means of artificial procidentia are, that you can make your applications with more accuracy and certainty; that the vagina will be less excoriated by the discharges, and that adhesions cannot be formed in such a way as usually bind the womb above; that, day by day, you can watch the progress of the disease, and if you find it encroaching on the cervix, it can be cut off in a few moments by the scissors, or more slowly by the ecraseur; and, lastly, if the cancer still advances and implicates the body, a way has been prepared for its entire removal.

For I think the evidence is conclusive that toleration of the procidentia is equivalent to toleration of the operation for removal.

Another point here comes up, the justification of any or all surgical operations in cancerous tumors.

In 1850, I heard an able report read by Professor Mussey, of Cincinnati, against the propriety of such operations, founded on the experience of American surgeons, but I think quite a change has occurred since then in medical opinion. Mr. Birkett, of Guy's Hospital, London, published a paper in 1866, giving his experience in one hundred and fifty cases, covering a period of eighteen years. It is carefully prepared, and his deductions are given with great circumspection and are entitled to much respect. He sums up by saying: "In conclusion, I

trust that I have demonstrated to my skeptical professional brethren, that a certain proportion of cancer patients can receive benefit by submitting to the removal of the first growth of the disease, and that the benefit derived from the operation is two-fold, *viz.:* 1st, prolongation of life; 2d, exemption from disease for a considerable period of time in many instances."

It may seem irrelevant or superfluous to have discussed the surgical questions alluded to in this essay, but I do not think artificial procidentia justifiable, unless surgical interference in all its various grades may be resorted to with propriety.

To recapitulate. I have endeavored to show, 1st, that there is nothing in the anatomy of the parts to prevent the induction of procidentia, but that in fact it occasionally occurs spontaneously. 2d. That in the early stage of cancer, adhesions do not exist to such an extent as to render it dangerous or impracticable; and, 3d. That applications of caustic can be made more accurately to the prolapsed organ; and that amputation of the cervix, and, in extreme cases, ablation of the entire uterus, can be practised with safety under these circumstances.

I am aware that it may be said that all these operations can be performed without all this long preparation and infliction of suffering, but my own experience warrants me in saying that the old plan has invariably failed in our hands in arresting the disease, and anything that offers more chances of success should not be discarded without a fair trial.

I am sorry, however, to be obliged to confess that this paper was prepared about eight months ago, and, during the interval that has elapsed, I have not found a case in a sufficiently early state of development to enable me to apply the proposed method. —*New Orleans Journal of Medicine.*

CASE OF POISONING BY ALCOHOLIC EXTRACT OF BELLADONNA.

As the following case presents several points of interest, I transmit it with but few comments:

December 28, 1866, feeling indisposed, I ordered for myself: Sulph. quin., grs. v.; ext. coloc. do., grs. x.; pil. mass. hyd., v., M. Ft. pil. No. iv.

I received the four pills, two of which I at once took, and soon after retired (about eleven A.M.) I slept but little, but was not very restive, and did not observe anything peculiar in

my sensations until near eight A.M. the following morning when on putting my foot on the floor, I came near loosing my balance and staggared some distance across the room, unable to support myself steadily, or regulate the movements of my legs. Dressing with much difficulty, I managed to reach the surgery, where, seating myself, I commenced prescribing for the sick. I now, for the first time, found that I was unable to read the names on the sick report, the page appearing perfectly blank. Up to this time I had not been able to control my thoughts. On rising, I remember that I had a faint idea that something was wrong, but was unable to say what; the acts in putting on my clothes were performed nearly involuntarily, the prominent idea being the necessity I was under of being punctually at my post at sick call. Not seeing any names on the sick report, I asked the steward the reason, and then discovered that I could not control the movements of my tongue. I managed, however, to make myself understood, and was informed that the names were there. I remember that then, by a strong impulse, I collected my thoughts to endeavor to ascertain the cause of my disability. The first thought which presented itself was that I was drunk, but this I rejected, as I could not remember having drunk any intoxicating liquor the preceding day. Next, I ran over my actions the evening before, and I recalled the two pills I had taken, recollected their composition with difficulty, and the thought then struck me that as the extract of colocynth and extract of belladonna were both put up in pots much alike, one had been mistaken for the other. I remember that I recalled the amount I had probably taken, and determined that I would prescribe for the sick, if I could neither see, speak distinctly, nor stand steadily, before I retired to my room. I ordered the steward to call the names out, and when the first man came up I could see his outline, but could not recognize his features. I, however, remembered his name and what should be the matter with him, and having his last prescription read out, I continued it, afraid to trust myself in prescribing. In this way, with few changes, and then careful to use the simplest of medicines, I saw, or rather did not see, some thirty sick, for each of whom I prescribed, or continued his former prescription.

I then returned to my room with a brain whirling, a dull, heavy pain in the back of the head, and my mind wandering from time to time. I recollect distinctly trying to collect my thoughts, and using the utmost exertions of my will to keep them fixed, so as to try to remember the smallest fatal dose of the extract of belladonna, and to recall all the symptoms of

poisoning from that drug, and their proper treatment. I came to the conclusion that I would treat myself on general principles. I had some strong coffee brought and put before me, and drank cupful after cupful. I sent for whiskey, and mixing it with the coffee, I continued its use, taking also, during the day, several half grain pills of morphiæ sulph.

This treatment relieved the giddiness. I found my mind ceased to wander, and though a vague feeling—a feeling of vacuity—of a lack of something, still continued, together with a severe pain in the back of the head whenever I tried to think, I felt better. I now tried to examine my eyes in a glass, but could only see a general outline. However, by going across to the other side of the room and looking at the glass, I managed to discover that my pupils had expanded so that I could see no iris. As I now look back to this period, everything—my thoughts and actions—all seem vague and misty; though I remember them, and that distinctly, still the thoughts seem to have formed themselves under the power of a strong effort of the will, and that the least relaxed, the thought would escape. So too, with my actions. In walking, I can remember that on fixing one foot on the ground, it required an effort of the will to raise the other, and much judgment in so placing it that the body's centre of gravity was preserved. My arms and legs—but the latter not to the same extent—felt numb and cold to my touch. With great difficulty I held anything in my hands. By noon, or four hours since I first noticed the effects of the poison, I was able to visit and prescribe for some twenty patients in hospital, but returned greatly exhausted. This state continued all the afternoon and evening, and I passed a sleepless night; my mind wandering, and vague and misty visions presenting themselves. For two days my vision continued much impaired, and it gradually became normal as the pupils resumed their usual size.

While my vision was most impaired, I noticed objects nearly as well as ever a mile or two out on the prairie, though if I looked attentively, the effort became exceedingly painful. The action of the brain slowly became normal. Exertion of any kind—even the reading of the simplest book—caused intense fatigue, and a dull, heavy pain in the back of the head. These symptoms, together with great lassitude, continued for two or three weeks. There are a few symptoms that I have neglected to mention. Colicky pains and dryness of the mouth and throat presented themselves on the second day. The dejections for several days were dark colored, and extremely offen-

sive, and the urine was voided frequently and in large quantities. Some days after these symptoms, I noticed on my hand a large red blotch, which disappeared on pressure, and which, in the course of a week, faded, leaving the skin rough. For two months I felt lassitude, and but little mental exertion was required to bring back the peculiar feeling in the head.

I have described this case with minuteness, as its chief point of interest seems to me to reside in the control the will appears to have had over the cerebrum, constantly bringing the mind under control, and holding it to its work; and in the remembrance of things, and their appearance, seen with a brain and through optic nerves poisoned with belladonna.

In conclusion, I will only add that the amount of poison taken was five grains. The preparation used was Squibb's alc. ext., and, as I had supposed, it had been used for the ext. coloc. co. by the soldier whom I had been compelled to use as a steward.—H. A. Dubois, M.D., Assistant-Surgeon U.S.A., in the *Medical Record.*

NEW YORK PATHOLOGICAL SOCIETY.

Stated Meeting, November 27, 1867.

Dr. B. H. SANDS, President, in the Chair.

VALUABLE EXPERIMENTS ON LIGATION OF ARTERIES.

Dr. Benj. Howard presented a series of specimens, stating, that as he had six recent cases to exhibit, he would, in description, confine himself to the chief points in the respective cases, and would endeavor to avoid a repetition of anything expressed upon the same subject upon a previous occasion.

The history of the first specimen I present, marked No. 5, is as follows: Desirous of observing the result of a simple apposition of the internal coats of an artery, I prepared a band of lead, about a line in width, smoothed all sharp edges, and polished it brightly; its length was such that, when doubled upon itself, it sufficiently exceeded the diameter of the artery as to allow of its being passed around the vessel, and the two ends clamped together, without any mechanical injury to the coats of the vessel. I applied this ligature in the manner described, to the right common carotid artery of a sheep, on the 17th of October. On the 23d of November, being thirty-seven days after the operation, I made an incision in the line of the cica-

trix, which was well healed, when I found, close beneath the surface, the ligature in a state of dryness, and waiting to drop from the cicatrix. The deposit of fibrine is seen to have been quite extensive, forming a solid mass from the artery to the integument. Through the whole extent of this will be observed a sinus communicating with the place where the ligature was found, and the point of its application.

The longitudinal section of the artery shows that the occlusion of the artery by fibrine at the point of ligation, and by a well-formed plug above and below it, is perfect. The ligature appears to contain in its embrace, the part of the artery it was made to include.

No. 6.—October 17. I applied to the right common carotid of another sheep, a lead-wire ligature, tying it loosely, diminishing calibre about two-thirds. November 22d, being thirty-six days after, I found this cicatrix healed, but at about its middle, a small fluctuating tumor. On making an incision through it along the line of cicatrix, the tumor was found to contain about a drachm of very thick pus, in which I found the ligature. The deposit of fibrine will be seen to be greater in this than in the last specimen; and through its whole extent, from its point of application to the abscess, the ligature had ulcerated its way. It is very interesting to observe the plug of fibrine, which is clearly shown *in situ*, by which the whole rear track of the ligature has been closed up as it advanced toward the integument.

The longitudinal section shows, as do others, that at the point of ligation, for the portion of artery destroyed by the ligature, is substituted a solid mass of fibrine, and that the artery is thus perfectly occluded, as well as by the clot above and below.

No. 10.—October 31. To the right carotid of a sheep, I applied a flat silk ligature outside its sheath, diminishing the calibre of the artery barely one-half. November 23d, being twenty-three days after, I found the cicatrix soundly healed, the fibrous deposit smaller than in either of the two preceding cases; and you will observe that the longitudinal section of the artery reveals the same dense fibrine substituted for the canal of the artery at the point of ligation.

There is no sinus or trace of the ligature visible in this specimen, as there was in the other cases. But we know it did escape, because it was found outside the wound, the free end having been fastened there at the time of ligation.

No. 7. My object in the case now before us, was to observe the effect upon an artery of a simple cessation of function.

Accordingly, October 31st, I applied three silver-wire ligatures, the second being about twelve lines above the first, and the third about four lines above the second.

The first was tied with little less than the average tightness commonly used in the silk ligature; the second broke close to the loop, so that I had but to cut off the free end; the third I tied with firmness, but with more caution, to avoid repetition of the accident incident to the second; twenty-two days after, I vivisected this specimen, the cicatrix was not firm and the hemorrhage was great. It will be seen that the calibre of the arterial canal, between the ligatures, is very much diminished, and is occupied towards its centre by what appears to be an organized clot, which, as we approach the points of ligation on either hand, becomes a firm plug of fibrine.

The history of the disused artery is, however, of but small importance, compared with that of the ligatures as here observed.

The first ligature cannot be found. The second is also wanting; and from the original site of each throughout the fibrinous mass, toward the cicatrix, you will observe an open sinus through which they have been discharged. The third ligature, applied with less force, will be seen lying loosely within the artery, at the internal end of the upper sinus, apparently waiting to be extruded. The occlusion about each ligated point is complete.

No. 9. This is the right carotid of a sheep, which I ligated October 31. The ligature was of silver wire, the same as that used in the last specimen exhibited. I tied it by a single flat knot, and cut off the ends closely. I applied it outside the sheath, tying loosely, and diminishing the calibre of the artery about half or two-thirds.

November 23d, being twenty-three days after the operation, I found the cicatrix quite sound. The vivisection was accompanied with very little hemorrhage, and here is the specimen. There is but little deposition of fibrine, and a longitudinal section of the artery reveals the ligature *in situ*, as applied; the looseness of its application being manifest by the size of the piece of whalebone passed through its loop. It will be seen there is no sign of suppuration or sloughing, but only the deposition of fibrine for the envelopment of the ligature, and that due to inflammation following the laceration of the areolar tissue in the performance of the operation.

Here is a specimen exhibiting the difference between the effect of the "surgeon's" or flat knot, and the ordinary knot, upon the internal and middle coats.

In neither case are the divided edges of the inner coats in apposition; in the former case you will observe, by means of the lens which I will pass around with it, that the divided ends are curled upward, their flat surfaces forming a plane representing the diameter of the artery, at right angles with its long axis; they are therefore not in apposition with each other, but only in juxtaposition.

The ordinary round knot, you will see, has produced a puckering and partial laceration of the inner coats, the plications terminating like radii in the centre of the transverse section exhibited.

The specimens presented exhibit in each case where a loose ligature has been used, whether of silver, lead, or silk, perfect occlusion of the arterial canal.

When the loose ligature has consisted of lead or of silk, ulceration and suppuration have occurred, with extrusion of the ligature toward the surface.

Equally, with other specimens previously presented, these exhibit that *every* TIGHT *ligature of either kind, and every* LOOSE *ligature except the* SILVER, *has been extruded; but the "loose silver ligature" is followed by obliteration, fibrinous and extensive, with exemption from sloughing, from suppuration, and from extrusion of ligature common to every case of other kinds exhibited.*

Here are the facts, as far as they go. The theory which after a sufficient accumulation may be woven out of them, may be worthy the consideration of the Society. As to the causes of the differences in results, I may be allowed to suggest that the questions in order might be:

1st.—*The Ligature.* What relation exists between the different qualities of the different ligatures, and the difference in the results exhibited respectively?

2d.—*Looseness.* In the absence of sudden lesion of the artery, and of sudden complete strangulation of the vasa vasorum, are not the parts better able to perform the new task suggested and assigned to them?

Is not the operation, the shock, the local and general disturbance more moderate than in the case of a tight ligature?

Is not the gradual accommodation of the collateral branches to the demand instituted on the application of a loose ligature, sufficient to account for the absence of the great oozing common only to all the vivisections made in the region of a recent *tight* ligation?—*Medical Record.*

DEVELOPMENT AND TREATMENT OF ALBUMINURIA.

To the Editors of the Boston Medical & Surgical Journal:

In view of the notorious inefficacy of our treatment of Bright's disease, I thought the following note might be interesting. It is a condensation of an article read before the French Academie Impériale de Médecine, by Prof. Semola of Naples, and is the complement of a previous memoir by the same author. In his previous communication, Prof. Semola developed the opinion that the passage of the albumen into the urine, in Bright's disease, was necessary consequence of a general deficiency of nutrition, by which the albumen, rendered incapable of performing its functions, was eliminated by the kidneys as a substance foreign to the organism. According to this theory, the alterations of these organs would play only a secondary rôle in the development of the disease; and although the condition of the kidneys is of value in prognosis, Prof. Semola protests against the ideas of those who pretend to explain or resolve the question by purely anatomical deductions.

One diagnostic sign distinguishing organic from symptomatic albuminuria is furnished by the quantity of the urea, which in true Bright's disease diminishes with the first appearance of the albumen, and, at a later period, accumulates in the blood. The same is true of the sulphates. Of the artificial albuminurias, that produced by the suppression of the cutaneous functions is the most like Bright's disease. This suppression both prevents the oxidation of the materials introduced into the system in the form of peptones (the products of the digestion of albumen), and causes a congestion of the viscera and especially of the kidneys.

Thus, according to this author, Bright's disease is not the result of a primitive anatomical lesion of the kidneys, but is a result of this double series of effects which succeed the more or less sudden suppression of the functions of the skin.

The aim of the physician should be to reëstablish these functions, and thus increase the oxidation of the peptones, and relieve the renal congestion.

Among the means best suited to this purpose are the ordinary sweatings, or, in obstinate cases, hot air baths always followed by cool or cold shower baths; preparations of arsenic, and inhalations of oxygen. The diet should be vegetable or starchy, with but very little meat.

[*Boston Med. and Surg. Journal.*] W. F. M.

Book Notices.

Obstetric Clinic: A Practical Contribution to the Study of Obstetrics and the Diseases of Women and Children. By George T. Elliot, Jr., A.M., M.D., Professor of Obstetrics and Diseases of Women and Children in the Bellevue Hospital Medical College; Physician to the Bellevue Hospital, and the New York Lying-In Asylum; etc., etc., etc. New York: D. Appleton & Co. 1868.

This is an octavo volume of 458 pages, published in excellent style; paper and type both being good. It embraces seventeen chapters, on the following topics: Relations of Albuminuria to Pregnancy; Prophylaxis of Puerperal Eclampsia—varieties of puerperal convulsions; Chloroform and Venesection in Puerperal Eclampsia; Relation of Epilepsy to the Puerperal State—Puerperal Mania; Ante-Partum Hemorrhage; Induction of Labor; Effect of the Tonic Circular Contraction of a Band of Uterine Muscular Fibres on Labor—Brow and Face Presentations—Rupture of the Uterus; Post-Partem Hemorrhage; Obstetric Operations in Deformed Pelves; Choice, Use, and Applications of Forceps; Embryotomy; Version; Inflammatory Complications in the Surgical Treatment of the Diseases of Women; Certain Conditions of the Bladder in Women; Dangers from Compression of the Funis; Recto-Perineal Abscess; Kiesteine.

The author has had ample opportunities for clinical observation, and his work will be found of real value to the general practitioner. For Sale by S. C. Griggs & Co. Price, $4.50.

A Practical Treatise on the Diseases of Children. By D. Francis Condie, M.D., Fellow of the College of Physicians; Member of the Amer. Med. Association; etc., etc. Sixth edition, revised and enlarged. Philadelphia: Henry C. Lea. 1868.

This a full-sized octavo volume of 783 pages, well bound. The former editions have been well known to the reading part of the profession, and generally recognized as one of the best works on the diseases of children in our language. In preparing the present edition for the press, the entire work has undergone a thorough revision by the author. We cordially recommend the work to all, whether students or practitioners. For sale by W. B. KEEN & Co., 148 Lake Street.

Pennsylvania Hospital Reports. Vol. I. 1868. Philadelphia: LINDSAY & BLAKISTON.

This is a full-sized octavo volume of 420 pages, published in elegant style. It embraces twenty-three articles, all on topics of direct practical importance, and by the most experienced observers and investigators in the profession of Philadelphia. It is the first of a series of volumes which are promised, by which the important results of hospital experience will become accessible to the profession generally. We have intimations that similar volumes will be issued, founded upon the records of the extensive hospitals of New York and some other cities. The present volume may be found at W. B. KEEN & Co.'s, 148 Lake Street. Price, $5.00.

We have only space to acknowledge the receipt of the following works:

Spermatorrhœa: Its Causes, Symptomatology, Pathology, Diagnosis, Prognosis, and Treatment. By ROBERTS BARTHOLOW, A.M., M.D., Prof. Materia Medica and Therapeutics in the Med. College of Ohio; Lecturer on Clinical Medicine, and Physician to the Hospital of the Good Samaritan; etc., etc., etc. Second edition, revised and augmented. New York: WM. WOOD & Co., 61 Walker Street. 1867. Received through W. B. KEEN & Co., 148 Lake St., Chicago.

Plastics: A New Classification and a Brief Exposition of Plastic Surgery. A reprint from a report in the Transactions of

the Illinois State Medical Society for 1867. By DAVID PRINCE, M.D. Philadelphia: LINDSAY & BLAKISTON. 1868. Pp. 96. Price, $1.50.

Diseases of the Heart: Their Diagnosis and Treatment. By DAVID WOOSTER, M.D., Member of the Royal Academy of Medicine and Surgery, Turin; Assistant-Surgeon in the Mexican War; etc., etc., etc. San Francisco: W. H. BANCROFT & Co. 1867. Duo., pp. 210. For sale at No. 113 William Street, New York.

Treatment of Diseases of the Throat and Lungs, by Inhalation, with a New Inhaling Apparatus. By EMIL SIEGLE, M.D. Translated from the Second German Edition, by S. NICKLES, M.D. Cincinnati: R. W. CARROLL & Co., 117 West Fourth Street. 1868. Duo., pp. 136.

Chronic Diseases of the Larynx, with special reference to Laryngoscopic Diagnosis and Local Therapeutics. By Dr. ADELBERT TOBOLD, Lecturer in the University of Berlin. Translated from the German and edited by GEORGE M. BEARD, A.M., M.D., Lecturer on Nervous Diseases in the Ueiversity of New York. With an Introduction on the History and Art of Laryngoscopy and Rhinoscopy, Rhinitis, Inhalations, and Electrizations applied to Diseases of the Air-Passages; and an Appendix by the Editor. Illustrated by forty-four engravings on wood. New York: WM. WOOD & Co., 61 Walker Street. 1868. Octavo, pp. 279. From W. B. KEEN & Co., 148 Lake Street.

Signs and Diseases of Pregnancy. By THOMAS HAWKS TANNER, M.D., F.L.S., Member of Royal College of Physicians, etc. From the second and enlarged London Edition. With four colored plates and illustrations on wood. Philadelphia: HENRY C. LEA. 1868. Octavo, pp. 490. From W. B. KEEN & Co., 148 Lake Street.

Editorial.

Medical Education.—Nearly nine months have elapsed since the Convention of Delegates from a large part of the Medical Colleges in the country was held in Cincinnati, and, after full and free discussion, adopted, with much unanimity, certain propositions relating to important changes in the mode and extent of medical college instruction. The propositions adopted, with the record of proceedings of the Convention, were extensively published in the medical periodicals of the country, and several months have elapsed since a Committee, appointed by that Convention, presented in due form a copy of the same propositions to the Faculties of each of the colleges in the United States, with a request that explicit action should be taken on the question of their approval and practical adoption, or amendment, or rejection. What responses have been made by the several colleges to the Committee it is not our purpose at present to state. It is exceedingly desirable, however, that all the *Faculties* who have not responded should do so before the first of March next, that the Committee may be enabled to decide whether it is expedient or necessary to call another convention or not.

The propositions submitted for the consideration and adoption of the colleges, have elicited more or less discussion in all the important medical periodicals of the country, and have received a cordial and almost unanimous approval. In regard to the necessity of exacting a standard of preliminary education there is not a dissenting voice. One or two have objected to the proposed extension of the period of study to *four* years; and one (*Cincinnati Lancet and Observer*), while admitting the desirableness and great advantages to result from the propositions to require attendance on three courses of lectures, and to give the instruction in the several branches in consecutive series, instead of heterogeneous, advocates delay in their actual

adoption in practice, on the singular ground that the *profession* are not prepared to sustain them at this time. The editor expresses the hope that the time may come when the *profession* will be *educated up* to the point of affording the necessary support. To talk of *educating the profession at large up* to the point of sustaining the measures proposed by the late Convention at Cincinnati sounds queerly at this day, and makes one almost suspect that our neighbor of the *Lancet* has just awakened from a Rip Van Winkle sleep on this subject. Why, neighbor, the profession at large was *educated up* on this subject more than twenty years since, and gave full proof of the fact in the adoption of propositions having the same end in view at the first meeting of the American Medical Association in 1847. And the profession at large, through their commissioned representatives in State and National Associations, have been almost annually reiterating the demand on the colleges for systematic and thorough improvements in our system of medical college instruction.

Our friend simply put the boot on the wrong foot. It is not the *profession at large* that needs "educating up," but the Faculties of the several colleges. And, even here, it is not an education of the intellect that is needed. For we do not believe there are ten professors in all the regular medical colleges in the United States, who could look each other in the face and seriously claim that the changes proposed, in all their essential features, were not correct and of great practical importance. It is rather in the line of mutual confidence in the integrity of each other, and in a little of that independent professional patriotism that practically places the interests of the profession and the community above the temporary interests of *self*, that additional education is needed. There is no longer any propriety in "whipping the Devil around the bush" in regard to improvements in our system (or rather want of system) of medical education. The real obstacle in the way of any and all desirable improvements is a puerile distrust of each other, entertained by the faculties of the several schools.

A quarter of a century ago, when this subject was under

discussion in the Medical Society of the State of New York, the delegates from the schools of that State opposed every proposition for increasing the extent of instruction or requirements for graduation, on the ground that the standard in these respects was as high in New York as in any of the surrounding States; and if their schools exacted more it would only drive students from them to those of New England and Pennsylvania. It is precisely the same to-day. The schools of New York hesitate to take a single decidedly advanced step, through fear that those of Boston and Philadelphia will not in "*good faith*" do the same; and those of Philadelphia are influenced by the same distrust of those in New York. The school at Albany hesitates through distrust of those at Pittsfield, Woodstock, and Buffalo. Those of Buffalo and Chicago, most of them, stand shivering behind the *free* State dignity of the Michigan University, while the latter wastes its energies in fighting off homœopathy and other *isms* with the State Legislature. Those of Cincinnati and St. Louis distrust those of Louisville, Nashville, and New Orleans, and the latter reciprocate the same.

It was expressly to obviate this distrust, by affording a medium through which concert of action might be procured, that the American Medical Association was originally called into existence. The Faculties of the several colleges, feeling the force of general professional sentiment, as strongly and repeatedly expressed through that and State organizations, and conscious of the correctness of the demands upon them for improvements, have still allowed this selfish distrust to hold sway, and, with two or three exceptions, have, all these twenty years, endeavored to parry the just demands of the profession and the permanent interests of humanity, by such temporizing expedients as two or three weeks of preliminary lectures before the commencement of the regular annual lecture terms, or the addition of summer courses on special topics, all of which make a show on paper, but are of little real importance, simply because they are never attended by one-fifth of the whole number of students. The action of the recent Convention at Cincinnati has afforded an opportunity for the colleges to abandon

all these expedients and come directly, in full concert, up to the reasonable requirements of the profession.

How far the several faculties can overcome their mutual distrust, and foolish ambition for *large* classes instead of *well-qualified* ones, their responses to the Committee of the Convention will show. Let the questions proposed be answered with a directness and candor becoming the dignity and interests of an honorable and learned profession. If they do not show sufficient harmony in regard to all the details of the present plan, let another convention be called to complete the adjustment of differences at once. We believe the time has fully come, when temporizing expedients and excuses will no longer satisfy the great mass of the profession. The existing medical schools must either adopt, in good faith, substantially, the improvements proposed by the recent Convention, or see new schools, organized on the basis indicated, spring into existence in every large city in the whole country. As the new schools thus forced into existence, by the non-action of the present ones, will require of the student a longer period of study, attendance on more courses of lectures, better preliminary qualifications, and annual examinations as they progress from one series to the next, they must and will endeavor to offset these increased demands upon the time and attainments of the student, by lowering the rate of lecture fees. It needs no prophetic inspiration, to see the alternatives and tendencies here indicated; for they are logically deducible from the present relations of the schools to the profession. The Faculties connected with the colleges in most of the larger cities have been, and still are, anxious to secure uniformity of action in favor of a reasonably high standard of lecture fees. We respectfully suggest to them that the speediest way to accomplish permanently such a result, is to adopt in full the recommendations of the Cincinnati Convention, which would result in rapidly concentrating all medical college instruction in such populous centres as would furnish the required hospitals for the clinical courses; and would thereby remove nearly all the obstacles in the way of adopting a uniform and fair standard of *fees*. It is said that a word to the wise is sufficient.

Chicago Medical Society.—At a recent meeting of this Society, Dr. E. L. Holmes presented a section of the œsophagus, from the interior lining of which had been developed a morbid growth or tumor presenting all the microscopic and other characteristics of medullary cancer. The chief point of interest in the history of the case, was the very short period of time that the patient had suffered any inconvenience in swallowing food or drinks. The whole duration of his sickness was reported to have been only six weeks; and the first two of these he complained but little.

The remainder of the meeting was occupied with a discussion concerning the *modus operandi* and therapeutic application of aconite, digitalis, and veratrum viride. Dr. N. S. Davis, in opening the discussion, stated briefly the experiments and observations that had been made for determining the special action of digitalis and veratrum viride and deduced therefrom, as well as from observation of their effects in ordinary practice, the following conclusions:

1st. Digitalis acts upon the organic nervous and muscular systems in such a manner as to increase the contractility of the latter, and thereby increase the force of the contractions of the heart, the muscular fibres of the gravid uterus, etc.; while, secondarily, it increases the secretion from the kidneys, and, in large doses, often excites purging with abdominal pains and bloody stools.

2d. Veratrum viride acts as a direct sedative, diminishing both the force and frequency of the action of the heart and arteries, and, in full doses, inducing free emesis. Unlike digitalis, it relaxes the tone and impairs the contractility of the muscular structures. Whether it produces its sedative action by a primary influence on the organic nervous system, or by a direct modification of the elementary susceptibility of the tissues, is not positively determined.

3d. The veratrum viride, as a therapeutic agent, may be used with advantage in all those diseases characterized by frequency and fulness or tension of the circulation; but not when frequency is associated with positive weakness of pulse or mus-

cular relaxation. On the contrary, digitalis is applicable, as a sedative, to such cases only as present feebleness with frequency of cardiac and arterial action, and still more, if such feebleness is associated with a morbidly excitable condition of the nervous structures, as in certain cases of delirium tremens, hysteria, etc.

The discussion was participated in by Drs. Hatch, Paoli, H. M. Lyman, Reid, and Holmes.

Dr. Paoli spoke more particularly of the therapeutic value of aconite, which he regards as both sedative and narcotic; and, consequently, capable of application to the treatment of almost all diseases of excitement. He prefers the tincture or fluid extract of the root, which he gives in doses of half a minim to a minim, repeated every one or two hours until the desired effect is induced, then lengthening the interval, to avoid accumulation of action. He regards it as necessary to watch the effects of the remedy closely while administering it as a sedative. He regarded digitalis as applicable and sometimes promptly beneficial in cases of feebleness and frequency of cardiac action, but positively dangerous in *hypertrophy* and active irritation.

Dr. Lyman had not used digitalis as a sedative, but only as a diuretic. He regarded both veratrum viride and aconite as very valuable arterial sedatives. He had used a combination of aconite and morphia with excellent effects, as a substitute for pulv. Doveri, in procuring sleep and diaphoresis. The same combination also promptly relieves some cases of neuralgia, and is much less liable to be followed by secondary nausea and vomiting than the preparations of opium given alone. Dr. Gross had given the same combination with benefit in cases of dysmenorrhœa. He regarded the administration of aconite, as a sedative, more dangerous than veratrum viride, because the latter limits its own action by the induction of vomiting.

Dr. Reid had used aconite as a sedative more frequently than veratrum viride. His opinions and experience coincided with those of Dr. Paoli. He had seen some cases, in which numb-

ness and prickling in the fingers was induced by taking a single dose of *one drop* of the tincture of aconite root.

Chicago Medical College.—The Public Commencement of the Chicago Medical College will be held in the afternoon of the first Tuesday in March, at the College, on the corner of State and Twenty-Second Streets. The valedictory address will be delivered by Prof. E. Andrews. On Monday afternoon preceding the commencement, a public meeting will be held, commencing at 2½ o'clock, at which the candidates for graduation will be publicly examined in class, and some of them required to read their theses. This meeting will be at the College, and censors and members of the State and City Medical Societies are especially invited to attend and participate in the examinations. On Tuesday, a meeting of the Alumni Association of the College will be held, for the renewal of acquaintances, reading of papers, and the transaction of business. After the close of the public commencement exercises, on Tuesday evening a social entertainment will be given to the graduating class, Alumni, and their friends, by the President of the Faculty.

Rush Medical College.—The Public Commencement exercises of Rush Medical College will be held on Wednesday evening, February 5th, in the lecture-room of the College, corner of North Dearborn and Indiana Streets. Although the time will probably have passed before this number of the Examiner reaches its readers, we will add that the degrees will be conferred by the President of the College, Prof. Blaney, and the valedictory addeess delivered by Prof. R. L. Rea.

State Medical Societies.—We are glad to see that the profession in some of our adjoining States have been reviving and reänimating their State Medical Societies. That of Missouri was recently started anew, in a manner to indicate a good prospect for permanency and usefulness. That of Wisconsin, met a few duys since, at Madison, and was attended by a goodly number of members. Our old friend Dr. H. Van Duzen,

of Mineral Point, was chosen President; and we are quite sure that, under his administration, it will prosper.

Personal.—Prof. W. H. Byford, of this city, sailed for Europe early in January. He intends to be absent six or eight months. His object is recreation and professional improvement. His place is being well filled in the Chicago Medical College, temporarily, by Dr. E. O. F. Roler.

Give an Inch and an Ell is Taken.—This old saying is capable of very extensive application in the ordinary affairs of life. It was strikingly illustrated in the advertising recently of two physicians, of good standing hitherto, who had determined to devote themselves exclusively to the treatment of syphilitic diseases. They called on several of the leading practitioners of the city, representing that they were engaging in this specialty in the same manner and as strictly within the rules of the profession as others do in the special department of ophthalmology. Under such representations, they obtained the consent of several prominent men to have their names used as references on an ordinary business card. Among those thus assenting, were the names of prominent members of both the medical college faculties in this city. In a few days, these gentlemen found their names not only appended to a simple business card, but that card published in the "Medical Column" of several of our city papers; in thousands of circulars; and, we are told, in several country newspapers. As soon as this extensive advertising business was discovered, those members of the faculty of the Chicago Medical College whose names were involved, immediately forbid the further publication of them in any form. Our own rule has been, for several years, to allow no use of our name for any *special* purpose whatever. It is the only safe rule.

To Prevent Metals from Rusting.—Dip the article into very dilute nitric acid, and afterwards immerse it in linseed oil, allowing the superfluous portions to drain off. When the coating of oil is thoroughly dry, the article will be ready for use, and, thus protected, will remain bright for years.

Money Receipts to Feb. 1st.—Drs. N. Senn, $3; J. B. Corr, 3; A. C. Corr, 3; J. W. Johns, 3; J. W. Bennett, 3; A. Patterson, 3; J. Priestman, 4; Q. M. Triplett, 3; J. H. Judson, 3; John D. Brundage, 3; V. C. Price, 3; W. L. Kreider, 3; F. Sikora, 3; J. A. Adrian, 3; J. R. Flood, 3; J. S. Bullock, 2; Chas. W. Oleson, 3; T. D. Palmer, 3; Geo. W. Crossley, 3; C. B. Reed, 3; J. P. Johnston, 3; L. H. Kennedy, 3; R. W. Winton, 3; N. W. Abbott, 5; J. F. Young, 3; W. H. Buchtel, 3; W. R. Fox, 6; John A. Macdonald, 4; J. S. Lawrence, 2; Hiram Nance, 3; Sumner Clark, 3; J. McLaughlin, 3; D. M. Bond, 3; Wm. Dillon, 3; James M. Kielly, 3; Geo. H. Calkins, 3; J. H. Newland, 3; A. Hager, 3; S. Rex Bucher, 3; D. Scott, 3; C. M. Robertson, 3.

Incompatibility of Pot. Iodid. and Potass. Chlorat.—This is an important point in practice, for in syphilis, to act at the same time upon the ulceration of the mouth and the general malady, chlorat. potass. and pot. iodid. are frequently given. This practice is dangerous, as has been demonstrated by M. Vée; for the chlorate of potash, absorbed simultaneously with the iodide of potassium, may part with its oxygen, and transform it into the iodate, a poisonous agent. The recent experience of M. Melsens proves the possibility of this transformation.

This ought to suffice to prevent, were it only as a precautionary measure, the simultaneous administration of the chlorate of potash and the iodide of potassium.—*Gaz. Med. de Paris.*

Mortality among Physicians at Galveston, Texas.—Not less than eight practising physicians have died of yellow fever in Houston, Texas, during the prevalence of the epidemic.

TO PHYSICIANS.—His attempts to extend a more advanced knowledge of his specialty to physicians already in practice having been so favorably commented upon by those of the profession who have attended the previous courses, and by the medical press.

PROFESSOR HORATIO R. STORER

Will deliver his third private course of twelve Lectures upon the

TREATMENT OF THE SURGICAL DISEASES OF WOMEN,

During the first fortnight of June, at his rooms in Boston.

Fee $50; and Diploma required to be shown. Certificates of attendance upon the courses already completed have been issued to the following gentlemen: Drs. J. B. Walker, Union, Me.; Alexander J. Stone, Augusta, Me.; Daniel Mann, Pelham, N.H.; Augustus Harris, Colebrook, N.H; J. W. Parsons, Portsmouth, N.H.; E. F. Upham, West Randolph, Vt.; G. E. Bullard, Blackstone, Mass.; J. A. McDonough, Boston, Mass.; J. G. Pinkham, Cambridge, Mass.; James Coolidge, Athol, Mass.; Thomas G. Potter, Providence, R.I.; C. M. Carleton, Norwich, Conn.; I. Farrar, Hartford, Conn.; M. C. Talbott, Warren, Pa.; H. Gerould, Erie, Pa.; W. W. Bancroft, Granville, Ohio; A. I. Beach, Bellville, Ohio; Henry E. Paine, Dixon, Ill.; W. L. Wells, Howall, Mich.; and W. A. I. Case, Hamilton, C.W.

Hotel Pelham, Boston, January, 1868. feb3t.

CHLORODYNE.

To the Editor of the Medical Record, SIR:—In the late edition of Aitken's Practice of Medicine (1866), Chlorodyne is several times recommended as a valuable remedy, and a formula is given on p. 471, vol i, which is said to be "a very useful one."

It is strange that a compound of this description should have obtained the sanction of physicians in the absence of any authentic or officinal directions for its preparation. In prescribing it, unless the nostrum is specified, the practitioner may not know which of many compounds will be furnished. I have before me five different formulas for chlorodyne, all differing in respect to ingredients and their proportions; and not one of them would furnish a good imitation of the English nostrum.

If a chloroform-anodyne is deemed worthy of the place it now holds in public estimation, it should have a uniform composition, or be made officinal, in order to prevent the hazard and uncertainty which must now be incident to its administration. The following is Dr. Aitken's formula:

℞. Chloroform f. ʒiv; Æth. Sulph. f. ʒij; Theraicæ (Treacle) f. ʒj; Mucilag. Acaciæ f. ʒij; Morph. Muriat. gr. viij; Acid. Hydrocyanic. dil. (2 per cent) ʒij; Ol. Menth. Pip. M. iv ad vi. *Misce bene.*

Further directions are given about combining the materials, which we have attempted to follow, but, on standing, the whole of the ether and chloroform separate from the "constituent," so that the formula cannot be considered an eligible one.

About two years ago, the writer obtained a sample of Dr. Browne's genuine chlorodyne for examination. It was of a dark color, with an odor of chloroform and ether. By repeated and careful tests we failed to discover in it either cannabis or hydrocyanic acid. (The same result was obtained by Mr. Chas. Bullock, in his examination of a similar article.) The "constituent" was found to be molasses, gum acacia, and ext. glycyrrhiza. It contained no peppermint. There might possibly have been a small quantity of capsicum, but the pungent effects of this and the chloroform are so similar, that its presence may be considered doubtful. An imitation, containing only chloroform, morphia, and ether, resembles "the genuine" in sensible properties and operative effects. I published, accordingly, the following formula for chlorodyne, and should not have thought it of sufficient consequence to refer to it again, but for the notice taken of the compound in so respectable a work as Aitken's Practice of Medicine. The following is an imitation of Dr. J. Collis Browne's Chlorodyne:

Heat molasses in a water-bath, and remove the scum until it becomes clear. Mix one part of officinal mucilage of acacia with two parts of the molasses, to form the constituent.

Dissolve eight gr. sulphate of morphia in one drachm and a-half of water, by heat, and add eight gr. powdered extract of liquorice. To this solution, add one fluid drachm of conc. sulphuric ether. Add a portion of the constituent, and two fluid drachms of chloroform, and shake the mixture, then add enough of the constituent to make one fluid ounce.

Ten minims, or twenty drops, contain $\frac{1}{6}$ gr. of the morphia salt, two minims and a-half or ten drops of chloroform, and half the quantity of ether.

Chlorodyne thus prepared resembles the nostrum in pungency, color, density, and other properties. If the prescriber wishes to administer cannabis or hydrocyanic acid, they may be added extemporaneously. Truly yours,

Rochester, N. Y., Dec., 1867. W. W. ELY, M.D.

The question is so commonly raised as to the necessity of revaccination, and as to what is the best and surest method of vaccinating, that we think the following extracts from the report of the revaccination of the Prussian army for 1866, (taken from the *Berlin Klin. Wochens,*) will be of interest. The number vaccinated was 42,269; 86 per cent had plain scars, 9 per cent indistinct scars, and 5 per cent no marks of former vaccinations. The result of the vaccination was perfect in 60 per cent, imperfect in 13 per cent, nil in 27 per cent. Of these 27 per cent, about 30 per cent, or about 8 per cent of the whole number, on a second trial had perfect sores, making 68 per cent of perfect revaccinations. From the experiments with different methods of vaccination, the following conclusions are drawn:— 1st. For military purposes, vaccination from arm to arm is to be preferred. 2d. The result of vaccination with glycerine lymph is generally more uncertain in proportion as the dilution of the lymph with glycerine is greater. 3d. Mixtures of one part lymph to eight, nine, or ten of glycerine are not to be depended upon in the revaccination of recruits. 4th. A less dilution produces in recruits good, genuine, and numerous pocks,and is, therefore, to be recommended for further exper. iments in the annual vaccinations.

Resections.—M. Sedillot has written a letter to the Imperial Society of Surgery, on the regeneration of bone. It is too long for quotation entire, but of great interest. He contradicts

the two principles of sub-periosteal resection in the following terms:

One, to which Larghi has given the general name of sub-periosteal resection, is founded on the idea that the periosteum detached and isolated in the condition of a sheath or a flap, is able to renew or reproduce the subjacent bone from which it is stripped or raised.

The other principle, which I have called sub-periosteal gouging or scraping, has for its principle, that it is the periosteum, *only when attached* to the bone, that is able to renew it; and that, in consequence, the bone beneath the periosteum should be husbanded and preserved with the very greatest care.

After invoking the aid of the Baconian method of research, M. Sedillot quotes numerous series of experiments which, in his opinion, are sufficient to prove that the periosteal flaps, if completely isolated from the subjacent bone, are unable to reproduce it; "and that the so-called method of sub-periosteal resection is founded on a deplorable illusion;" and gives his opinion that the chief use of preserving the periosteum at all, is to supply a mould for the bony matter which is left in his method of periosteal gouging, and which really reproduces the bone.—*Ed. Med. Jour.*, *Gaz. des Hopitaux*, *Am. Jour. Med. Sciences.*

Spiders.—Father Babaz has communicated to the French Academy of Science an account of his experiments with spiders, and the manner in which he ascertained a fact hitherto unknown to naturalists, *viz.*, that most spiders possess not only the faculty of spinning a thread, but also that of projecting one or several, sometimes of the length of five or six metres, which they use to traverse distances with, and affix their thread to a given point for the support of their web. They even seem to have the power of directing the extremity of an ejaculated thread to a given point; they seem to feel for the place where it is most desirable to fix it. Certain spiders, the Thomisa Bufo, for instance, will eject a bunch of threads which, curling up in the air and shining in the sun with various hues, gives the insect the appearance of a peacock displaying his tail. But this is not all: spiders can fly and swim in the air, though they are heavier than alcohol. To perform this feat, they turn their back to the ground, and keep their legs closely folded up on the body, and in this posture sail about with perfect ease.

Professor Pajot of Paris proposes the following method of fixing the head in certain cases of embryotomy:

"I perforate the cranium in the usual manner, and introduce into the opening a little stick four or five centimetres long and as big as the little finger, to the middle of which a string has already been fastened. I introduce this stick endwise within the cranium, by means of a tamponning forceps. When it is completely introduced, I draw upon the string; the stick becomes horizontal, either before or behind, on one side or the other of the pelvis, according as I judge to be desirable. I have then the head entirely at my control. Entrusting the string to an assistant, I apply the instrument which I have chosen, cephalotribe or forceps, without being embarassed by the string, which takes up no room in the vagina, and I have thus remedied the mobility of the head, a cause giving great difficulty in certain operations, and especially I have remedied it without a new instrument. This, in a word, is my procedure."

The Missouri Medical Association was duly resuscitated on the 12th December, after a long sleep of ten years, and has inaugurated some wise measures relating to the future prosperity of medicine in the State. A communication from the St. Louis Medical Society, asking of the Legislature a Board of Medical Examiners to be appointed by the Missouri Association, with power to grant licenses, was adopted, and a committee appointed to prepare a suitable memorial. They also endorsed most emphatically the stand taken in the matter of medical education by the recent convention of Medical Teachers.

Detecting Belladonna.—Mr. H. C. Scorby read a paper lately before the Sheffield Literary and Philosophical Society, in which he set forth the difficulties which the toxicologist encounters in his efforts to prove a case of poisoning by belladonna. These difficulties are obviated by the use of the micro-spectroscope. The spectrum of the juice of belladonna is very distinct, especially when the coloring matter has been added to a solution of carbonate of soda. A small fraction of a single berry is sufficient to produce the spectrum bands characteristic of the belladonna.

The Chair in the French Academy of Sciences made vacant by the death of Civiale, has been filled by the election of Baron Larrey, who received forty-five of the fifty-six votes cast.

Dr. D. S. Young has been appointed to the Chair of Surgery in the Cincinnati Medical College.—*Medical Record.*

Treatment of Stricture of the Urethra by Immediate Dilatation.—Mr. Holt continues to be highly successful in the use of his stricture dilator. He records in the *Lancet* 114 cases occurring in private and hospital practice, during the past year, upon which he operated. Not a single bad result followed, and only one complication—a small abscess of the penis—resulting from breaking the instrument. Many of his cases have been of the most unpromising character, and one especially, that of an India officer, deserves mention. He had abscess of the prostate, following stricture and infiltration of urine. The abscess broke into the rectum, establishing recto-vesical fistula, and there were fistulous openings in the perineum and right buttock. But little urine escapes through the penis, the patient being obliged to undress and sit upon a vessel when he desired to urinate. The suffering and impairment of health were great. No instrument was passed at the first trial; but at the second, the patient being under the influence of chloroform, the dilator was passed and the stricture split with a No. 12 tube. A gum-elastic catheter was retained in the urethra. The patient never had a bad symptom. The fistulous openings rapidly healed, and he was soon able to micturate with perfect ease.—*Pacific Med. & Surg. Journal.*

AMERICAN MEDICAL ASSOCIATION—PRIZE ESSAYS FOR 1868.

The American Medical Association offers two prizes of *One Hundred Dollars* each, for the best two original essays upon subjects of professional interest; the Committee reserving the right to reject all, unless deemed fully worthy.

Competitors for these prizes must forward their essays to Dr. Charles Woodward, Cincinnati, Ohio, free of expense, on or before the 1st of April, 1868.

Each essay must be accompanied by a sealed note containing the author's name and address, and on this sealed packet must be inscribed some sentiment, motto, or device, corresponding to a like sentiment, motto, or device on the essay.

Charles Woodward, Chairman,
W. W. Dawson,
E. B. Stevens,
Roberts Bartholow,
P. S. Connor,
} Committee.

Medical journals throughout the country are requested to copy.

MORTALITY OF CHICAGO FOR 1867:—We copy the following Report from the proceedings of the Board of Health, as published in the *Chicago Daily Times*. It contains much that may be useful for future reference:—[ED.]

The Health Department of Chicago constitutes a branch of the municipal government which has in charge the most important interests of the citizen. The eradication of disease and the adoption of precautionary measures to restrain the spread of diseases and epidemics, is a matter so important that all persons are more or less interested in the action of those who have these important objects in charge.

Since last July, the Health Department has endeavored to systematize all its workings and reduce everything pertaining to sanitary benefits to a method. Rigorous registration and efficient executive officers have effected this, and in the limited mortality of the past year is found the best illustration of what can be done by an organization devoted to the sanitary improvement of the City.

THE WORK OF THE YEAR.

The following tabular statement of the work done by the department during the year exhibits in detail what has been done to conserve the public health:—

NUMBER OF NUISANCES REPORTED AND ABATED UPON NOTICE.

Ashes and rubbish on streets, and yards, and alleys	1492	Filthy hog-pens	79
Garbage	1336	Filthy hide stores and cellars	45
Manure piles	9757	Filthy privies	1775
Full privies	8070	Filthy packing-houses	7
Filthy areas and alleys	5634	Filthy soap factories	3
Filthy butcher-shops	6	Filthy stables	1500
Filthy cellars	125	Filthy sinks	900
Filthy cess-pools and cisterns	149	Filthy slaughter-pens	4
Filthy drains	580	Filthy tanneries	5
Filthy distilleries	4	Filthy vacant lots	309
Filthy gutters on st's and alleys	1489	Filthy water closets	513
Filthy grocery stores	10	Total	34,139
Filthy houses	349		

No. of notices served to connect with street sewers (Premisis connected 1097.)	1857
New privy vaults built	831
Total Number of all notices served	36,827
Total Number of all notices served in 1866	16,787
Loads of swill removed by City scavengers	6,842
Loads of ashes removed by City scavengers	10,360
Total	17,202

Barrels of rotten apples removed	256
Barrels of rotten potatoes removed	389
Barrels of rotten eggs removed	45
Barrels of rotten fish removed	63
Barrels of rotten pickels removed	500
Total	1,253
Baskets and boxes of rotten peaches removed	459
Baskets and boxes of rotten grapes removed	45
Baskets and boxes of rotten oranges and lemons removed	257
Total	761
Barrels and bags of rotten poultry removed	35
Number of dead animals removed:—	
Dead horses removed	147
Dead sheep removed	67
Dead cows removed	34
Dead hogs removed	56
Dead dogs and cats removed	11,251
Dead chickens removed	1,850
Total	13,405
Main sewers disinfected	3
Private sewers disinfected	1,735
Sloughs and slips	35
Total	1,773
Miles of streets and alleys disinfected	146
Number of houses disinfected	79
Number of privies disinfected	2150
Number of small-pox cases reported	722
Number of varioloid cases reported	244
Total	966

SMALL-POX.

Number of patients removed to the small-pox hospital	182
Number of houses under sanitary inspection where patients resided	784
Number of summons served for violation of the health ordinances	1138
Fines assessed in the police court	$5133,20
Twenty-eight persons were arrested for dumping manure on the streets, and the fines assessed upon them in the police court amounted to	259,00
Total	$5392,20

DISINFECTANTS.

Disinfectants and absorbents used:—	
Copperas, lbs.	24,596
Sal chloride zinc, bbls.	2
Carbonic acid, bbls.	7
Heavy Oil, bbls.	32
Disinfecting compounds, bbls.	112
Gypsum, bbls.	105
Lime, bbls.	755

MORTALITY FOR 1867.

The following is the mortality report for the year. Its details and comparisons will prove of interest to the public:—

Abortion	1	Dropsy	75	Meningitis	38
Abscess	9	Dysentery	79	" cereb.-spinal	19
Accidents	169	Dyspepsia	1	" tuberculous	5
Ædema glottidis	1	Encephalites	7	Morbus coxarius	2
Anæmia	3	Endrocardites	2	Mouth, malformation	1
Anæsarca	1	Enteritis	29	Myelitis	2
Anginia	5	Enterocolites	3	Nephritis	3
Aorta, aneurism of	1	Epilepsy	13	Neuralgia	1
Ascites	1	Erysipelas	13	Old Age	72
Asphyxia	2	Exhaustion	1	Œsophagus, inflam'on	1
Asthma	3	Exposure	1	Ovarian disease	2
Apoplexy	22	Fever, bilious	14	Over-exertion	1
Atrophy	5	" congestive	24	Paralysis	21
Birth, premature	79	" puerperal	21	Paraphlegia	1
" still	252	" putrid	1	Pericarditis	2
Bowels, inflammation	52	" remittent	9	Peritonitis	15
" obstruction	5	" scarlet	99	Pharyngitis	1
Brain, congestion of	48	" spotted	1	Phlegmasia dolens	2
" disease of	22	" typhoid	163	Phlebitis	1
" inflammation	59	" typhus	27	Phthisis pulmonalisis	398
Bright's disease	5	" intermittent		Pneumonia	159
Bronchitis	25	Fungus hemadotes	1	Potts' disease	1
Cancer	22	Gall bladder, disease	1	Porrporra	1
" of duodenum	1	Gangrene	5	Pyemia	1
" of face	1	Gastrites	14	Rheumatism	7
" of intestines	1	Gastrœntrites	2	Rubia	1
" of liver	2	Gravel	1	Scrofula	7
" of stomach	7	Hæmatemesis	2	Small-pox	115
" of uterus	6	Hæmoptysis	1	Softening spinal cord	1
Canker sore mouth	3	Hemorrhage, umbilical	1	Spine, disease of	9
Carries, knee	1	Heart, disease of	59	Stomach, disease of	4
" spine	1	Hemiplegia	1	" congestion of	1
Catarrh	2	Hepatitis	4	Stricture	1
Cerebritis	3	Hernia	4	Suicide	19
Chest, disease of	1	Hip disease	1	Sunstroke	7
Chlorosis	1	Hydrocephalus	59	Suffocation	2
Chicken-pox	2	Hypertrophy of heart	2	Syphilis	2
Cirrhosis	1	Insanity	2	Tabes mesenterica	115
Cholera morbus	19	Inanition	28	Tapeworm	1
" infantum	542	Intemperance	2	Teething	148
Cold	11	Jaundice	6	Tetanus	3
Convulsions	398	Kidneys, disease of	7	Tonsils, inflammation	1
Croup	98	" inflammation	1	Throat, disease of	2
Cyomosis	6	Laryngitis	10	" malformation	1
Cyanche tonsillaries	1	Leg, commin'ted fract.	1	Thrush	1
Debility	74	Liver, disease of	3	Trismus	1
Delirium tremens	14	" corrhasis of	2	Tumor	2
Diabetes	1	" inflammation of	10	Ulceration	3
Diarrhœa	144	Lungs, congestion of	30	" bowels	1
Diphtheria	76	" disease of	27	" stomach	1
" brain	8	" hemorrhage of	4	Uræmia	1
" chest	2	Lupus	1	Urine, suppression of	1
" heart	1	Measles	87	Uterus, rupture of	1

Vesical calculus	1	Worms	2		
Whooping-cough	62	Unknown	138	Total	4604

AGES.

Under 5	2784	40 to 50	237	90 to 100	4
5 to 10	182	50 to 60	140	100 to 110	2
10 to 20	176	60 to 70	126	Unknown	97
20 to 30	381	70 to 80	61		
30 to 40	378	80 to 90	36	Total	4604

NATIVITY.

Chicago	2460	Holland	27	Russia	1
Other parts U. S.	675	Ireland	428	Scotland	36
Austria	6	Isle of Man	1	Shetland Islands	1
Belgium	1	Island of St. Helena	1	Sweden	57
Bohemia	57	Italy	1	Switzerland	10
Canada	51	Norway	92	Wales	5
Denmark	12	Nova Scotia	2	On the Sea	3
England	97	Prussia	27	Unknown	34
France	14	Poland	3		
Germany	482			Total	4604

Deaths from Still-birth and Accidental Causes—1866, 331; 1867, 521.

Deaths by Disease—1866, 5594; 1867, 4083; Decrease in 1867, 1511.

Interments at various Cemeteries in October, 1866, 1525; Deaths reported in October, 1866, 1170; Number not accounted for, 355.

DEATHS BY MONTHS IN 1867.

January	299	June	283	October	428
February	255	July	597	November	360
March	280	August	696	December	380
April	278	September	507		
May	241			Total	4604

BIRTHS SINCE JULY 1, 1867.

July	412	October	459	December	508
August	481	November	452		
September	497			Total	2809

Males 1409 | Females 1400

MORTALITY BY WARDS SINCE JULY 1, 1867.

First Ward	35	Seventh Ward	343	Thirteenth Ward	141
Second Ward	121	Eighth Ward	192	Fourteenth Ward	201
Third Ward	146	Ninth Ward	166	Fifteenth Ward	240
Fourth Ward	142	Tenth Ward	93	Sixteenth Ward	173
Fifth Ward	162	Eleventh Ward	191		
Sixth Ward	202	Twelfth Ward	235	Total	2785

Total deaths in 1866	5925
Total deaths in 1867	4604
Decrease	1321

EXPENDITURES.

Amount expended since April 1, 1867:—

Scavenger work	$23,344	Small-pox Hospital	2,500	Salaries	28,000
Disinfectants	1,500	Cholera " (rep's)	63	Sundries	745
Stationery	375	Office furniture, etc.	500		
Printing	1,150			Total	$63,177

LONG ISLAND COLLEGE HOSPITAL

BROOKLYN, N. Y.

FACULTY.

AUSTIN FLINT, M.D., Prof. of Clinical Medicine.
FRANK H. HAMILTON, M.D., Prof. of Principles and Practice of Surgery, Fractures and Dislocations, and Military Surgery.
DEWITT C. ENOS, M.D., Prof. of Operative and Clinical Surgery.
AUSTIN FLINT, Jr., M.D., Prof. of Physiology and Microscopic Anatomy.
DARWIN G. EATON, M.D., Professor of Chemistry and Toxicology.
WM. GILFILLAN, M.D., Professor of Surgical Anatomy.
SAMUEL G. ARMOR, M.D., Prof. of Principles and Practice of Medicine and Materia Medica.
CORYDON L. FORD, M.D., Professor of Anatomy.
FOSTER SWIFT, M.D., Prof. of Obstetrics and Diseases of Women and Children.

The NINTH REGULAR TERM OF LECTURES will commence in the Hospital buildings, corner of Henry and Pacific Streets, on the 1st of March, 1868, and end in July. For circulars and information, in reference to the College, address T. L. MASON, M.D., President, 120 Joralemon Street, or W. H. DUDLEY, M.D., Registrar, 201 Henry Street.

FEES:

Professors Tickets,	$140
Matriculation,	5
Dissecting,	10
Graduating,	25
Hospitals,	FREE

BORDEN'S EXTRACT OF BEEF,

For the immediate production of Beef-Tea.

This Extract consists of the juices of Choice Beef, cooked in the most perfect manner and concentrated by evaporation in vacuo into the smallest bulk. One pound comprises the soluble portions of twenty pounds of fresh beef obtained from mature animals slaughtered while in perfect health.

This Extract of Beef differs from Borden's Meat Biscuit (see U. S. Dispensatory) by being concentrated to a degree four times greater, and in not containing the farinaceous constituent, without the aid of which perfect preservation had not then been obtained. It is a nut-brown substance of the consistence of caoutchouc, possessing the flavor of delicately roasted meat and keeps in perfect condition for an indefinite length of time.

Dissolved in varying proportions, in hot water, and seasoned a Beef Tea, or Essence of Beef, of any desired richness is instantly produced, of aromatic flavor, more palatable than and superior in all essential qualities to that made by ordinary culinary methods, and which is gratefully received and retained by the stomach when other forms of food are rejected.

It has received the highest approval of many of the first physicians in the United States, and is offered for use wherever a stimulating and supporting aliment is indicated.

Full directions accompany each package.

Made by Borden & Currie, in Illinois, and sold by them at 112 East 29th Street, New York, also, by George W. Southwick, successor to Philip Schieffelin & Co., 58 and 60 Vesey Street, New York, and by many Druggists and Grocers throughout the country.

S. T. HINCKLEY, Agent, 104 State Street, Chicago.

THE

CHICAGO MEDICAL EXAMINER.

N. S. DAVIS, M.D., Editor.

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Original Contributions.

ARTICLE VII.

THE FUNCTION OF THE SPLEEN.

By Dr. H. K. JONES, Jacksonville, Ill.

Read to the Morgan County Medical Society, January 9th, 1868.

It must, of course, be merely tedious to attempt to bring forward details of experiments, observations, and various views and doctrines found in medical literature, respecting the anatomy and physiology of viscus; and mere presumption to attempt conclusions, of matters which have proven a stumbling-stone to authorities of the greatest weight and eminence. But, therefore, the subject still lies at our door, challenging the scientific and philosophic scrutiny of this age, and to this end I would reproduce it to the attention of this Society.

In part, doubtless, owing to the inherent security of the function of this organ, and partly because of the demonstration of the practicability of existence without it, both in animals and in man; its importance in the animal economy, both as regards its function in health, and its pathological conditions and relations in the diseases of the body, is greatly underrated; and so our knowledge is abated and limited. For, if true, that its functions are vital and, therefore, its maladies absolutely and relatively grave, in that truth is to be found the stimulus to research, adequate to the erasure from medical literature of the opprobrium of this confessed superficialness and ignorance.

It must be fairly illustrative of the state of our knowledge or science of this subject, no longer ago than the pupilage of some of us who, in this Society, are but junior members, to quote in brief the views of so eminent an authority as Dr. Carpenter. He introduces the spleen as an organ having "no excretory duct, nor anything glandular in its structure." * * That, "in regard to the functions of the spleen, great uncertainty exists. That the spleen performs no action essential to life, has been repeatedly proved, by the experimental removal of it in many of the lower animals, and by the accidental loss of it in man, * * for after the immediate effects of the wound were recovered from, the vital functions were performed with no perceptible interruption, and health appeared to be completely restored." * * That "one of the numerous theories of its operation, which have at different times been brought forward, the one which is most satisfactory to the author, is that which regards it as a sort of *diverticulum*, or reservoir, which may serve to relieve the portal venous system from undue distension under a great variety of circumstances." * * That, "from the observations of Mr. Dobson, it appears that the spleen has its maximum volume at the time when the process of chymification is at an end, *viz.*, about five hours after food is taken; and that it is small and contains little blood, even hours later, when no food has been taken in the interval. Hence, he inferred that this organ is the receptacle for the increased quantity of blood which the system acquires from the food, and which cannot, without danger, be admitted into the bloodvessels generally, and that it regains its previous dimensions after the volume of the circulating fluid has been reduced by secretion."

Later, and contrariwise, Dr. Dalton propounds the case thus: "The spleen is a glandular organ, analogous in its minute structure to the solitary and aquinated glands of the small intestine, and to the lymphatic glands throughout the body. Like them, it is a gland without an excretory duct, and resembles, also, in this respect, the thyroid and thymus glands and the supra-renal capsules. All these organs have a structure which is evidently glandular in its nature, and yet the name of glands has been

refused to them, because they have, as above mentioned, no duct, and produce, apparently, no distinct secretion. We have already seen, however, that a secretion may be produced in the interior of a glandular organ, like the sugar in the substance of the liver, and yet not be discharged by its excretory duct. The *veins* of the gland, in *this instance*, perform the part of excretory ducts. * * The action of such organs is, consequently, to modify the constitution of the blood. * * The precise alteration, however, which is effected in the blood during its passage through the splenic tissue has not yet been discovered."

The views of these eminent authorities in medical science and education, are here adduced for a double purpose:

1st. Of generalizing and fairly representing, as is supposed, the vagueness and contradictoriness of an accredited and standard literature of so modern a date; and,

2d. As affording us a convenient reduction of the matter of knowledge and to two recognized hypotheses, utterly inconsistent with each other, but within which—the one or the other—the truth may possibly be found, namely, the "*diverticulum*" or reservoir theory of Dr. Carpenter, on the one hand; and the *glandular* theory of Dr. Dalton, on the other hand.

Nor let it be supposed that Dr. Carpenter is the mere man of straw, set up for easy refutation, whilst, even at the present time, our prevailing splenic pathology and therapeutics, ideas of mere sanguineous plethora and engorgement, and consequent distension, hypertrophy, etc., are essentially grounded in the reservoir assumption.

This organ has a prominent position as a member and link in the golden circle of the great blood factories, and, accordingly, receives, in common with the stomach and liver, the first blood dispensed from the abdominal aorta. And, again, no other organ of the body receives so large a stream from the arterial fountains, in proportion to its size; and it returns the largest product in proportion to what it receives, its vein having six times the capacity of its artery. Its artery is larger than both the hepatic and gastric, and in its course dispenses twigs to the

stomach and pancreas, as if its organ were in some special honor and dignity among its compeers. Again, it receives and acts upon only the purest blood of the body, and has no excretory duct—suggestive that its work can scarcely be subordinate or menial, neither depurating nor emunctory, but some superior service in the abdominal order and series looking primarily to a common end and use, namely, the initiation and consummation of the blood. And, accordingly, it transmits *all* its products through the sanguineous and lymphatic channels directly toward the fountain-head and palace and kingdom of the blood.

Thus, its position among the organs related to the production of the blood, the peculiar quantity of its arterial and venous streams, the absence of depurating and emunctory apparatus, the direction and destination of all its products, are facts whose concurring import amounts to a sort of *prima facie* evidence that this organ may be entitled to a distinguished rank as a primary blood generating factory.

But this is a mere outside view, to which the argument is by no means limited. Let us now look within, and see what we shall see. And here we will pass by its membranes, its large vessels, its trabecular meshes, etc.,—the framework only of the body, matters not in obscurity or dispute—and enter the intertrabecular spaces, the chambers and workshops of the factory, in which we are to see the peculiar substance of the spleen—at first view, a pulpy mass of "dark, reddish-brown" color, including corpuscles, capillary meshes, etc., altogether constituting the chief part of the entire bulk of this body.

Now, what have we here in this mass of confusion? Is it inexplicable chaos? Or shall rational, inductive science yet illustrate and demonstrate herein the most complete order and the most beauteous and productive skill?

The foundations of the answer to this very practical question were begun to be laid two centuries ago, when the Italian, Malpighi, the father of microscopic anatomy, first entered these hitherto dark chambers. Up to his time, the prevalent views among scientific men of Europe, in common with the earlier Greeks also, were only vague notions, some of which have still

found their way down to our own times and country. Such as it was a useless and superfluous part of the body, an error of nature; or, that it was for the preservation of the equilibrium of the body; or, that it attracts watery materials from the stomach; or, that it was the sewer of the humor called atra bilis; or, that it fermented a menstruum for the stomach in digestion; or that it was the origin of laughter; or that it prepares the mucus to be secreted by the glands of the joints, etc.; and by rather more recent German and English authorities, (Schelnammer, Liston, Purcell, etc.) that it was a *diverticulum* for the blood in the more violent motions, etc., etc.

But Malpighi taught: "In the interstitial spaces of the spleen, we observe clusters of glands, or, rather, of vesicles or sacculi, in immense numbers, dispersed throughout the organ, and closely resembling bunches of grapes. These minute glands are of an oval figure, and about the size of the glands of the kidneys. I have always found them of a white color, and although the bloodvessels of the spleen may be fully injected with ink, and play around the glands, yet the latter still preserve their whiteness. They appear to consist of a membranous, but soft and very friable substance, the cavity in which is invisible by reason of its smallness, but still may be conjectured to exist, because these bodies collapse when cut. They are extremely numerous, indeed, almost innumerable, and are placed in a singular manner in the cells already described, all over the spleen, and hang from the productions of the capsule, or from fibres arising therefrom; consequently, from the extremities of the arteries and from the ends of the nerves, moreover, the ends of the arteries wind about them like tendrils of ivy. They usually hang in bunches, each cluster consisting of seven or eight glands."

Again, Winslow, the Danish anatomist, the disciple and later cotemporary, affirms: "The arteries, veins, and nerves, after entering the spleen, divide and subdivide into a great number of ramifications, and accompany each other to their very last divisions. The capillary extremities of all these ramifications, both arterial and venous, end in the small downy cells already

described. Malpighi regarded these cells as distinct capsules or follicles, each containing a small gland. The extremities of the capillary ramifications seem to swim or float in the cells and to fill their downy tissue with blood. At the ends of several of these capillaries, I have observed small corpuscles disposed like bunches of grapes; and I have seen two little tubes going out of each corpuscle, one short and open, the other long and small, which latter was lost in the sides of the spleen," etc.

Other and later investigators have abundantly confirmed and amplified these discoveries into the further particulars, as, that these splenic bodies are not only covered on their exterior by a complete capillary network, but that they are also *penetrated* and permeated by this vascular distribution, and also that the entire splenic pulp is made up of several other varieties of glandular bodies, suggestive of complexity of function.

In brief, authority and opinion have gravitated to the general conclusion above stated from Dalton, namely, that this is a glandular organ, analogous to others of the body having no excretory duct, and in some way and extent concerned in modifying the constitution of the blood, but in what way may, perhaps, justly be said to have received no adequate scientific attempt until the very last years.

Ffteen or twenty years since, Virchow propounded and defended certain specific doctrines concerning the origin and morphologic changes of the blood: as, that "every permanent change which takes place in the condition of the circulating juices must be derived from definite points in the body, from individual organs or tissues. * * All the morphological elements of the blood, *whatever may be their nature*, are considered to be derived from sources external to the blood * * that in the ordinary course of things, the lymphatic glands and the spleen are really intermediately concerned in the production of the formed elements of the blood; and that, in particular, the *corpuscular constituents* of this fluid are really descendants of the cellular bodies of the lymphatic glands and the spleen, which have been set free in their interiors and conveyed into the current of the blood."

But it probably remains to our own time and countrymen to consummate the solution of this problem, and bear the torch-light of demonstrative science throughout its dark and most intricate mazes. And, already, sagacious and indefatigable explorers have reported important progress.

Within the last year, Prof. Salisbury, of Cleveland, Ohio, has published a paper which may justly be admitted to be the ablest contribution ever made to medical literature upon this subject; richest in original research, and in its facts and reasonings and pertinent suggestions. Besides the arterial terminations by capillary ramifications upon the Malpighian corpuscles, he distinguishes, also, terminations in glandular structures of two other varieties, namely:

1. In *tubular glandules* followed by simple capillaries; and,
2. In *tubular glandules* followed by oval splenic bodies.

In these, he discovers and traces the formation of fibrine cells, and their transformation into fibrinous cells. "These fibrin cells," says he, "during their slow, creeping passage through these thin-walled vessels, are gradually, after becoming fully mature, spun or developed into fibrine filaments of extreme tenuity and transparency, so that by the time they have reached the veins they enter them as fibrin filaments, or as cells far advanced in filamentous metamorphosis." Moreover, "there are two sets of these cells, an internal and an external—one arranged longitudinally, the other transversely. Both possess singular powers of contractility, like that of the muscular fibre," etc.

And again, "when the fibrin cells are developed into filaments, their nuclei are set at liberty, take up nerve and coloring matter, become highly transparent and homogenous, assume a flattened shape, and form *blood discs*. This process can be traced through all its stages in the living spleen." "The spleen and lacteal and lymphatic glands are the main organs that organize fibrin cells and blood discs." And, "of all these glands, the spleen is the most important and the most largely engaged in this cell-forming process."

Indulge me in the notice now, of one other fact claimed by

this observer, namely: "In the spleen are found minute bodies containing a mesh of highly refractive cylindrical capillaries. * * They are always distended, highly refractive, and of a beautifully, pearly lustre. They resemble a meshwork of fine pearl-glass tubules. In these vessels may be noticed minute pearly drops, and on the membrane stretched across the meshes, the same kind of pearly drops aggregate into more or less spherical masses," and then, again, into larger globules, etc. And, finally: "These large globules take on a cell wall, and we have formed the genuine corpora amylacea." * * "They are the true myelin cells, or those cells which contain medullary nerve matter." And, again: "The contents of these cells after it has escaped from the cases, become aggregated into large globular masses, and from the sides of which are developed beautiful, double-walled, pearly, tubular filaments, precisely like those of *nerve tissue.*"

Now the above series of observations and facts, connected and corroborative, as landmarks indicating the progress of this inquiry through the last two centuries, are believed to embrace grounds and conclusions from which histological and physiological science will not recede, namely: Of this organ, its duct is not in the direction of depuration or emunctory work. It receives more arterial blood than can be appropriated to its own nutrition, and its large venous duct conveys away larger products than the residue and debris of its functions. And its products are sent exclusively towards the fountains. Also, its interstitial spaces are filled up with a variety of glandular bodies, unto which, as unto so many furnaces, and forges, and mills, are the ultimate ramifications and determinations of the apporting arterial streams, and from which bodies also arise the absorbent and capillary origins of the deporting venous and lymphatic trunks, which take up and bear away towards the sources of the blood materials unlike those received. So that, with the exception possibly of a minor system of anastomosing capillaries, the arterial stream, with all its vast supplies, must pass between the upper and the nether millstone of glandular structure, to be resolved into its principles and reorganized into

new forms for the perpetual reproduction and reconstruction of the blood.

And, lastly, one stands amid these workshops and sees the actual initiaments and progressions, first, of the fibrin cell with its ultimate development into the contractile filament, looking to the end of muscular nutrition; and then its nucleus developed and formed into the red-blood globule; and this, again, is here ermined and crimsoned, and sent away freighted with treasures for distant ports of the realm. And here is witnessed also the generation of the myeline cell, with its medullary substance and nerve filament, looking to the end of the endowment of the blood-disc, the surrounding and protection of the axis cylinder of the nerve conduits, and the ultimate nutrition and reproduction of the essential substance of the brains and the nerves.

Finally, this view is amply corroborated in the phenomena of ascertained pathological states of this organ—as,

1. In the case of deficiencies of coloring matter in the blood, as also in diseases of discolorations of this fluid, confessedly phenomenal of congestions, irritations, inflammations, indurations, hypertrophies, etc., of this viscus. Virchow, after a scrutinizing survey of the subjects of leukæmia, melanæmia, melanotic tumors, etc., concludes "that all the facts with which we are acquainted, concerning these conditions, indicate that the contamination of the blood has its rise in a definite organ, and that this organ, as in the colorless blood corpuscles, is generally the spleen."

2. In the case of the removal of this gland from the body, the voracity and increased ferocity of the animal until the consequent deficiencies of the blood in the above-named materials for muscular and nervous nutrition are compensated by the vicarious functions of associated and kindred organs, afford additional corroboration.

3. Another interesting and important class of corroborative facts are the sensational, intellectual, and moral symptoms of the patient, in the functional disorders of this organ, commonly reputed, not only in popular, but also in professional parlance,

to be splenetic affection of the mind, such as general irritability, particularly of the irascible dispositions, peevishness, moroseness, apprehensiveness, despondencies, anxieties, nostalgia, and, possibly, various monomanias, etc. This class of symptoms direct our attention, unmistakably, to deficiencies in the elements of cerebral and nervous nutriment, namely, medullary and nerve filament substances, the generation of which in the spleen has been ascertained as above mentioned. And, furthermore, Prof. Salisbury observes: "These (myeline cell substances) are taken up by the blood-discs which transmit them to their destinations. This matter communicates a high degree of plasticity and refractive pearly lustre to the discs. * * * The myeline performs the office of surrounding the axis cylinder of the nerves, forming an insulating tunic between it and the nerve sheath, which prevents the nerve from escaping in its transit, save at the terminus."

The relation of these matters to the nutrition and healthy and complete functions of the nervous system is so palpable, that the Professor insists "that by simply examining the blood microscopically, it can readily be determined whether a person is actively engaged in mental pursuits, under the influence of nervous exhaustion of any kind, or whether he is purely devoted to physical undertakings, is strong and robust, and is laboring under no influence which is exhausting his nerve tissue."

If now, in conclusion, it should be true, as the above chain of facts and reasonings tend to show, that in this organ as a *factory*—not as a mere *secreting* gland—are the generations and initiaments *de novo* of the fibrin cell and contractile filaments appertaining to the support of muscular tissue, and, also, of the myeline cell and nervous filament appertaining to the support of nervous nutrition and function; and, also, of the red blood corpuscle as, possibly, the carrier of certain supplies to glandular ports and marts abroad; and, finally, if on the other hand, there be found, concomitant with its abnormal conditions, muscular inanitions and debilities, mental and moral irritabilities and depressions, disturbance of the proportion of

the red and white blood cells, discolorations of the blood, etc., etc., we are, then, already on pretty fair advantage ground for the ultimate realization of a truly scientific physiology and pathology of this viscus. And this event may also possibly be hailed as the signal of deliverance for the liver and stomach and other of its neighbors that have, through the long time, endured and suffered untold indignities and penal inflictions for offenses not their own.

THE PHILOSOPHY OF TYPHOID OR CONTINUED FEVER.—A STUDY OF ITS DYNAMICS AND TREATMENT.

BY Z. C. McELROY, M.D., President.

Read before the Muskingum County (Ohio) Medical Society, Jan. 1, 1868.

In the discussion at our last meeting, on the treatment of typhoid fever, one of our fellows facetiously remarked, that "to treat a case of typhoid fever, it was a needful preliminary to have a case to treat." This remark meant, if it meant anything, that the diagnosis was sometimes difficult, or, if not difficult, the name was given to patients and friends for other purposes.

It occurred to me, that we could better understand a discussion of the treatment of any disease, if we had, as a preliminary, some common understanding of its nature and pathology.

It is my purpose, with the permission of the Society, to present it a picture of typhoid or continued fever, as studied in the light of modern philosophy, and the empirical facts in relation to it, common to medical minds and literature.

And, first, as to its cause or causes—most likely immaterial—the ordinary forces of nature acting in an ordinary way. It may, however, be accepted as certain, that it has two modes of origin, within the body, and from without the body, of those who suffer from it.

These are classed as sporadic, and endemic and epidemic cases. Probably, the most of the cases met with in our locality

arise from causes acting within the body of the patient; though cases from contagion—contact with others suffering from it—do occasionally occur.

The symptomatology may be briefly summed up in the words "loss of power, or loss of force." The dynamics of the system are turned into new channels. The stomach, the citadel of the system, refuses or rejects food; or, if retained, passes it on into the bowels undigested, where it undergoes decomposition, giving rise to uneasiness, pain, tympanitis, or diarrhœa. The muscles lose power, patients cannot and do not walk about with elastic step, and perform ordinary labor. The nervous system loses power; the brain cannot and does not act as in health. Every symptom may be referred to loss of power. A patient suffering from typhoid or continued fever must be regarded as in a condition of partial death. Coincident with loss of power, there is loss of bodily weight, whether with or without diarrhœa, sweating, expectoration, or hemorrhage.

With this loss of power and weight, we might, without patient thought, and philosophy to guide us, and the use of that unerring tell-tale of temperature, the thermometer, conclude we either have, or ought to have, diminished heat or temperature; but not so, the "burning disease" was correctly named; the temperature is constantly higher than natural, and its exaltation above the natural standard is a tolerably accurate measure of the intensity of the disease.

Now, what is the meaning of this series of phenomena, philosophically? In endeavoring to find the solution of this inquiry, we must keep constantly before the mind the fact, that no effects of force can be manifest to our senses, except as the result of some preëxisting force, and that no force is ever lost; it may be constantly changing its form, but is never destroyed. Now, why this loss of force and wasting in continued fever? Manifestly, the soft tissues of the body are burning up. And why? Because the fever poison has rendered more or less of them unsuitable for the further uses of the body. The diminished forces of life are diverted into new channels. The dynamics of life are engaged in consuming and removing out of

the body the effete or unsuitable tissues, and the phenomena can only be regarded as a conservative process, intended to save life. Boerhave's definition of fever, was, all things considered, the best ever given: that "fever was a mode of life resisting death."

The extent of tissue made useless to the body by the cause or causes of the fever, determines its duration, intensity, and termination.

If all the muscles were in a state of integrity, measured by the standard of health, they would not refuse to act. So of the various tissues of the viscera and nerves, including the sensorium commune.

Just in proportion to the delirium or coma, is the quantity of brain matter unsuitable for the further uses of the organism, large or small.

Nor are the tissues, or parts of tissues, thus rendered useless, if left in the body, harmless, as would be a piece of lead, gold, or silver, accidentally embedded and encysted in the body, nor yet in masses, as in sphacelus, but is deposited or exists interstitially through the muscles and organs, and perhaps enclosed in the interior, or in close proximity to the exterior of the osseous structures, as evidenced by the aching and soreness of the bones, as patients express it.

Of the nature of the changes occurring in the molecular structure of the tissues, from the action of the fever poison, it is impossible to speak, with any certainty, in the existing state of knowledge. We have no means of determining the nature of the changes in the tissues in beings killed by lightning. But the facts are known, that death does occur from shock by lightning. In many instances, there are certainly no changes of which our senses can take cognizance. The inference then, is irresistible, that the electricity has made such changes in the molecular structure of the tissues as to cause death. And the inference is equally irresistible, that the cause or causes of fever induces analogous changes in the various textures of the body, so as to render portions of them unsuitable for the purposes of life.

Further evidence, that such must be the condition of things in continued fever, is the fact that the tissues continue to waste; first, the adipose, then, the muscular and other soft, and, probably, portions of the denser tissues, until the emaciation is sometimes extreme. This waste of the tissues is always a prominent feature in continued fever, commencing sometimes days and weeks prior to the patient taking to bed or seeking medical advice; and this is more especially the case in patients in whom the fever poison is generated in their own systems. Occurring from the poison being taken into the system from without, the prodrome is always shorter, the development of the symptoms more prompt and decisive, and, it may be added, with proper medical treatment, the duration shorter. It may, indeed, prove to be true, that the difference in the origin of continued fevers may constitute the difference between the types known as typhoid and typhus.

Now, the human body in health, probably decays more rapidly than after death. The tissues, in fact, are perpetually renewed during life and health. The dynamics of life are due to the retrograde or destructive metamorphosis of the tissues, just as much as the phenomena of electro-magnetism are due to the oxidation of a metal. The sum of the mechanical, intellectual, emotional, sensational, psychological, and thermal work, or force, of a human body, is an exact measure of the destructive metamorphosis or oxidation of the tissues of the body, and the maintainance of an equilibrium depends on the amount and quality of food that can be taken into the system, and assimilated to its various organs and textures. How long would any of us live without food? And what would be the extent of the waste of the body and the length of life, if compelled to work until nature was exhausted? The time is limited to days, perhaps, scarcely two weeks; and the waste, perhaps, half the weight of the body, or more.

Now, in continued fever, there is a certain amount of muscular, nervous, and vascular tissue rendered unfit for the production of the most of the ordinary results of life and health. If it were not so, we would not have the weakness and waste

inseparable from continued fever. The phenomena of the fever are the dynamical results of the oxidation, or destructive metamorphosis, of this destructive tissue. The desire for food has gone, and only those things whose action is known to facilitate destructive metamorphosis are demanded or taken by patients. Of these, water and vegetable acids, as lemon or acetic, are more acceptable than anything else the patient swallows. But no matter how treated by physicians or nurses, patients continue to lose weight—in other words emaciate—day by day, until the effete tissues, or parts of tissues, are oxidized and passed out of the body. The solid debris is found in the urine and alvine discharges; the gaseous products find exit at the lungs and from the bowels; and these gaseous products are offensive according to the amount of nitrogenized tissue undergoing transformation.

Complications arise in the course of the removal of this effete tissue, according as one or several organs have an undue amount of effete matter or tissue interstitially deposited in them. If in the lungs, it is pneumonia; in the brain, more or less delirium or coma; in the intestines, or, more broadly speaking, abdominal viscera, there will be bowel-complaint, ulcerations, or, perhaps, perforations; in the dermoid tissue, sweating and abrasions; in the bloodvessels, pyæmia; and so on. Now, that is my understanding of continued or typhoid fever. If any fellow of our Society can name a single phenomenon, constant or occasional, occurring in the course of the disease, which cannot be explained by this hypothesis, it will give me pleasure to have it pointed out, for a solitary example has not occurred to my mind.

Viewed thus, the treatment of continued fever becomes a much more simple matter than it can be without this guide from philosophy. No *coup de etats* will be attempted, except in the earliest stages of the disease, originating from causes believed to be outside the body. Under such circumstances, there are very strong reasons for believing that strong emeto-cathartics do sometimes cut the disease short. Under other circumstances, they will fail to accomplish this end, but may

prove very advantageous in modifying the intensity of many of the symptoms. No specifics will find much favor in the hands of any physician guided by such views as it has been my endeavor to lay before you. As you cannot safely or profitably interfere with the destructive metamorphosis going on, upon which recovery depends, and giving the products every facility to find exit from the body, attention should be principally directed to supplying the system with the means of reconstructing its tissues. Remembering that the stomach, and, in fact, the whole digestive apparatus, is in a state of partial death, you would not offer it food in such forms as would be acceptable in health, for if you did, and did not wilfully misinterpret the results, you would hardly continue it. The part of digestion supplied by the glands of the mouth are, for the most part, wholly wanting. The capacity of the stomach to assimilate or digest food is fearfully diminished in grave cases. In speaking of symptomatology, you will remember, it was stated that solid food, for the most part, was not and could not be digested, and if not rejected by vomiting, and passed into the intestines, would there add greatly to their already embarrassed and disturbed condition. Food, then, in its highest state of organization, and in its most easily assimilable forms, should be given in small quantities and repeated at very short intervals—there should be no meals. Of food in this form, undoubtedly beef-essence and milk are the most important. Eggs would no doubt occur to your minds as another; but, until the crisis has been passed, eggs are about as likely, if not more likely, to do mischief as good; they decompose too readily, and their decomposition yields too many noxious gases and products, which can only add to the dangers and discomfort of the patient. But after the deepest depression has been reached and the stomach is resuming its tone and power, they are valuable food. Farinaceous articles may be given conjointly with beef-essence and milk, in fluid form, moderately, all through the disease, but the main reliance must be on meat-essence and milk.

If the destructive metamorphosis of unsuitable or effete tissue proceeds too rapidly, the patient succumbs early in the dis-

ease, or at whatever stage it takes place. Hence, the cautious use of agents to retard it becomes of the highest importance. The intensity of this metamorphosis is approximately measured by the thermometer, as well as by the circulation and respiration. Hence, ice, spirits, wine, ale, tea, coffee, valerian, belladonna, opium, aconite, and veratrum viride all have their uses, and each, properly timed, confer benefits.

As the life of the patient depends partly on the oxidation of the effete parts of the tissues, and the elimination of the products of the destructive metamorphosis out of the body, it can easily be seen that alcohol is a dangerous remedy, improperly timed, for the reason that its action is known to retard all of the processes going on needful to recovery, *viz.*, assimilation, destructive metamorphosis, and elimination; but exceedingly valuable in the low nervous states characterized by delirium, high temperatures, and excessive elimination

It will, however, more frequently occur that destructive metamorphosis and elimination proceed too slowly, and, as a consequence, digestion and assimilation are well nigh annihilated. For the relief of this condition of things, the mineral acids, especially the chlorohydric, preparations of iron, quinia, chlorate potassa, or bicarbonated alkalies, will be our best agents. The citrate of quinia and iron is a valuable agent, possessing the double property of promoting metamorphosis and elimination, though the perchloride, pyrophosphate, or iron by hydrogen, are very valuable. Sometimes the simple bitters may be advantageously combined with them. Stronger wines and malt liquors are safer and better agents to modify waste than brandy or whiskey.

In the management of the complications, poultices of flaxseed meal, with small proportions of mustard, are of very high value in pneumonia, continuously applied; though it may occasionally be needful to abstract small quantities of blood by leeches or cups, and sometimes apply blisters. And of the brain, blood from the temples, or blisters to the temples or sides of the occiput, with ice to scalp.

For the bowel complaint, better food, that is, food that will

not be passed into the intestines undigested, with turpentine stripes, opiate injections to the rectum, opium and alcohol internally; with an occasional necessity for saturnine and vegetable astringents. Abrasions of the surface to be bathed with alcohol, and protected by artificial cuticle of gutta percha in chloroform, or lead plasters.

Viewed in this way, too, the necessity for light, ventilation, cleanliness, and constant attention becomes too obvious to be mistaken or neglected. Frequent sponging or wetting the surface with water or soap and water, or diluted acetic acid, or alkalies, is of the utmost moment.

Such are the outlines of the philosophy of typhoid or continued fever and its remedial management, as it appears to me, studied in the light of the persistence of force, and as cases are managed falling under my especial care. If you can pick them to pieces, do so, for if they are not true, and a safe guide in the management of cases, pray show me the more excellent way.

ENLARGEMENT OF THE SPLEEN, OF NINETEEN YEARS' STANDING, CURED WITH IODINE IN FIVE MONTHS.

By A. GIVEN, M.D., Louisville, Ky.

I was consulted, August 15th, 1867, by Mrs. Hinkle, on account of a tumor in the left side of the abdomen. She stated that 20 years previous, when 9 years of age, she had chills, which lasted for 9 months. About that time, there was a fulness observed at the margin of the ribs, on the left side, which her physician said was caused by an enlargement of the spleen, and for which she was treated by several physicians without any relief.

She is the mother of four children, and in the enjoyment of very good health. The tumor had never given her any inconvenience until after the birth of her youngest child, two years ago; since that time it had increased very rapidly. At the

time I examined her, there was no pain or tenderness, and the only inconvenience she felt was from its weight, when attending to her household duties. The abdominal parietes being lax and pretty free from adipose, presented a favorable opportunity for diagnosing.

Upon examination, I found the following characteristics of the tumor: its upper border lying below the margin of the ribs, attached to a cord-like substance. I traced it around to the left into the lumbar region, down to the crest of the ilium; lying close to that bone, I traced it around to Poupart's ligament, and along the pubis to a little beyond the median line; thence, in a slightly irregular line, to the umbilicus; thence, in a curved line, to the cord-like substance before spoken of. The iliac and pubic borders were thin and irregular, corresponding with the irregularity of those parts. The umbilical border was round, and had a ridge-like feel; the surface was slightly concave or slightly depressed between the thick umbilical border and the fluting iliac border.

In order to get a correct diagnosis, I placed the patient in the recumbent position, elevated her hips, and began to knead the lower part of the tumor; it readily passed upwards and outwards, until it caused difficulty of breathing by its pressure against the diaphragm.

During the examination, the question arose in my mind, whether the tumor was malignant, ovarian, or enlargement of the spleen. The first was readily dismissed, on account of the general health, freedom from pain, and the complexion of the patient. But it was not so easy to diagnosticate between ovarian tumor and an enlarged spleen, inasmuch as the largest portion of the tumor occupied the usual position of ovarian. The irregularity of the tumor and its mobility beyond the usual situation of ovarian tumors, enabled me to pronounce it a case of enlargement of the spleen. After consulting Wood, and some notes which I had taken some years ago, I felt no doubt as to the correctness of my diagnosis. During the winter of 1858, while attending the clinics of Dr. N. S. Davis, in the medical wards of Mercy Hospital, Chicago, a case was pre-

sented to the class for examination, on the 28th of October, which was similar to the one now under consideration, except the tumor was accompanied with a dropsical effusion of the abdomen, which rendered it very difficult to diagnosticate between ovarian tumor and an enlarged spleen. I was not present when the case was again brought before the class, and cannot say whether the woman recovered or not; but the remarks of Professor Davis made an impression on my mind, as to the possibility of the spleen becoming so much distended; and he gave such a fine description of the pathology of those cases and the method of diagnosing them, which did very much to clear up the doubts from my mind as to the character of the present case. Then, again, while I had charge of the Refugee Hospital, at Louisville, in January, 1865, I admitted a girl, 12 years of age, to the medical ward, who was in the last stage of phthisis. I learned from her mother that about a year previous she had had intermittent fever, which lasted her for several months, leaving her with a cough and enlargement of the left side, near the margin of the ribs. On examination, I found a large wedge-like tumor lying loose in the left side of the abdominal cavity against the pubis. She died in a few days after being admitted. I made a *post mortem* and found the tumor to be the spleen lying entirely from under the ribs and against the pubis.

Being satisfied as to my diagnosis and the character of the tumor, the next point of interest was as to the treatment to be adopted. I could not see much prospect of success from the ordinary treatment, as laid down for splenitis. It was evident that if relieved at all, it must be by resolvents and absorbents. With this therapeutic indication in view, I put her upon the following:

℞. Iodine,---------- gr. x.
Iodide Potassa,---------- ℥ij.
Water,---------- ------- ℥j.

M., and give 12 drops, largely diluted with sweetened water, after each meal; and ordered the following liniment to be used:

℞. Camphor Soap Liniment, ---------- ʒvj.
Tr. Iodine,---------- ʒij.

M., and apply to the tumor twice a-day.

I gave directions that if the stomach became irritable, to discontinue the treatment for a few days. After following the above treatment for two months, I again examined the tumor, and found it softer and diminished one-half. I continued the treatment, with the same precautions as to the effects of the medicine on the system. I made another examination on the 15th of January, 1868, and found the tumor entirely gone, except a little fulness near the margin of the ribs.

I confess that I had no hopes of such a favorable result at my first examination; for it is seldom that we can get a patient to continue our treatment long enough to remove those large morbid growths, and to overcome the pathological condition necessary to their production and propagation. But by the rapid increase of the tumor, she was easily convinced that unless something was done soon, serious results would follow.

MONSTRA ABUNDANTIA.—A CASE OF DIFFICULT LABOR FROM DEFORMITY OF THE FŒTUS.

BY A. H. DE PUY, M.D., Toronto, Ind.

Being called to an obstetrical case, a short time ago, in which the diagnosis was very obscure, and the case rendered tedious and protracted in consequence of the deformed state of the child, which proved to be abdominal ascites. It contained about 11 pints of fluid, and measured two feet and one inch in circumference. There was nothing unusual in the first stage of labor, nor until the child's head presented at the inferior strait, when it became apparent that nature was not sufficient to terminate the case. I therefore sent for my obstetrical instruments, and my student, Dr. William H. Burtnett also sent a messenger for Dr. Daniel Camerie; all arrived in due time.

The patient being much exhausted, having been in labor 24

hours, we decided to give her an anodyne, and let her rest a short time. After examination and consultation, the pains returning, we succeeded in bringing down the head and arms, using traction; but making no further progress, we concluded next to dissect the head and shoulders, and perform version. This being done, I succeeded in securing the feet and bringing them down. We then introduced the blunt hook over the pubic bones of the child, using considerable force, but of no avail. Then we determined to remove the bowels and lungs, and thus cause a collapse. But, alas! to our surprise, the moment I perforated the abdominal cavity, an enormous quantity of fluid escaped, and the labor was terminated in a few minutes, *per vias naturalis.*

The woman made a good recovery, and is now living in Edgar Co., Ill.; is about 35 years of age, and mother of three children.

Proceedings of Societies.

MORGAN COUNTY MEDICAL SOCIETY.

The Morgan County Medical Society met on Thursday, December 12th, at 2½ o'clock P.M., at the Infirmary on South Sandy Street, with Dr. Henry Jones, the President, in the Chair. The proceedings of the last meeting were read and approved.

A motion was carried "that the names of applicants for admission to the Society be handed by the Secretary to the Committee on Membership."

The regular exercise for the day was then taken up. A verbal report upon the subject of Typhoid Fever, by Dr. Henry Jones. He could not be expected to say very much upon the subject in the short time allotted to him, but would endeavor to touch upon a few of the important points connected with the treatment of this disease.

The dearth of knowledge on the pathological conditions in fevers afforded us by the writers of the early part of this century, was commented upon, when the doctor gave his views upon certain points in the treatment of typhoid fever:

Little internal but active external treatment was the order for many years in France. Some recommended bleeding—others purging, and that only. I would first suggest, in relation to my own treatment, that particular attention be paid to the thorough ventilation and cleanliness of the sick room, and to the procuring of a good nurse. There should be no carpet in the room, and no draught of air over the bed of the patient. Activity of practice is not needed. Typhoid fever is often treated without being recognized. The peculiar rose-colored spots are generally present. There is always tenderness in the right iliac region. There may be no diarrhœa. I am prejudiced in favor of the old treatment, also of emetics, though they are now out of date. I think it would be well to use many things now out of date. In regard to purgatives, I would say that I do not think they interfere with the abnormal condition of Peyer's glands injuriously, but that they are relieved by keeping the intestines in a clean state. I employ mercurial purgatives in the first days of the disease, and in some instances occasionally in the farther progress of the disease.

Bleeding may sometimes be of benefit in typhoid fever. I have never been sorry when I have bled in this disease, but have sometimes been sorry that I have not bled. The famous French physicians were in favor of bleeding in the first stage. I do not think many patients are hurt by it in the first stage. I predict that hereafter more bleeding will be done than in the last ten years. I think the profession is veering round. There has been no change in the type of typhoid fever, but there has been a complete change of practice. I do not fear the diarrhœa of typhoid fever; fæcal matter I consider a source of irritation; with gentle purgative remedies, I believe you will have no diarrhœa. I do not believe in the use of astringents. Do not be too sedulous to diminish the diarrhœa in this disease. We sometimes have hemorrhage. I place much reliance upon

ice-water injections; I also use gallic acid and sugar of lead. I often use pediluvia, sinapisms, opium, and tartar emetic. I use stimulants a great deal less than I did ten years ago. Stimulants have been very fashionable of late; stimulation in everything has been the order of the day. I think the profession are altering their views upon this point. I rarely give stimulants in the early stages of this disease. Where the patients like stimulants, and they are craved, I should use them, but not otherwise. Many of the best methods of practice have become obsolete, and many of the old customs of our fathers are occasionally revived as new practice. I have not time to say anything of diet. I have seen but three cases of perforation of the intestines; they all died. To recapitulate, briefly: I suggest, as treatment, bleeding, purgatives, and do not be over alarmed about diarrhœa—do not lock up the system.

Dr. Long had observed very excellent results from the ice-water injections in hemorrhage, and had been induced to believe that their application would be beneficial to the ulcerated condition of the intestines themselves.

Dr. Prince remarked: I have used the tinct. chloride of iron, and the sulphate of iron and capsicum, in this disease, with beneficial results.

Dr. Fisher remarked, that at the meeting of the State Medical Society, Dr. Noble, of Bloomington, stated that "typhoid fever was a disease of the bowels." What is it? Will the gentlemen give us their opinions as to the pathology of the disease?

Dr. Prince remarked, that, during the years 1861 and 1862, he had many cases of typhoid fever in military hospitals. We found ulcerations of the small intestines in all fatal cases. But the severity of the symptoms had but little to do with the extent, the number, and size of the ulcerations found upon *post mortems*. The eruption was generally observed, but not in all cases. In one case, I observed a condition of contraction of the intestine, caused by the cicatrices of the ulcerated patches of Peyer's glands, taken from a convalescent patient who died from eating an orange. The intestine was closed by stricture produced by

these cicatrices. In my opinion, the ulcers result from the poison of the fever, and are not the cause of the fever. The relations between the ulcerations and the fever I regard as certain, as the relation between the eruption and the poison in small-pox. In some cases, there was a slough hanging, ready to be picked off, while, in other cases, the ulcerations were healed over with a very perceptible cicatrix. We examined some 8 or 10 cases. One case of typhoid fever got well, was discharged from the hospital, returned to duty, but was very soon taken with pneumonia, and died. The *post mortem* examination revealed in the intestines some cicatrices and some ulcerations that were not healed, showing that men were not always well when they were considered so.

Dr. Edgar remarked, that specimens of pieces of the intestines of typhoid fever cases and of chronic diarrhœa cases, when compared, presented very much the same appearance. Referred to an epidemic of both these diseases, at the same time, at Vicksburgh, during the war. At the *post mortem* examinations in these cases, no sloughs were observed, but a ragged condition, as if sloughing had taken place, was observed in both diseases. We found well-marked cases of typhoid fever with no ulcerations of the bowels.

Dr. Prince remarked, that he had one fatal case of fever at the hospital before spoken of, in which there was no diarrhœa, but in this case he found more ulcerations than in any other case examined.

Dr. Henry Jones remarked, that where, in life, unequivocal symptoms of typhoid fever existed, after death, *post mortem* examinations always revealed local lesions of the intestine, or, at all events, so the profession abroad had decided.

Dr. Edgar stated, that he did not believe that there was a specific *materies morbi* necessary for the production of typhoid fever. He believed that a combination of causes affecting the nervous centres sometimes produced it. The Doctor read the statistics of a series of years of the results of the cases occurring at the Massachusetts Hospital, at Boston, showing different results during the different years, as he presumed, under the

same treatment. His inference was, that epidemics of typhoid fever varied in intensity, and some were much more fatal than others, no matter what the mode of treatment adopted.

Dr. Prince suggested that Dr. Austin Flint recommended sulphuric acid as a remedy. Had more faith, however, in fresh air, in tents, in warm weather. Dr. Flint reduced the mortality by this treatment in the open air, to at least ten per cent.

Dr. Fisher thought we ought to understand the pathology of the disease, before we could get at a proper line of treatment; for a variety of opinions had been expressed as to its cause. Some considered that the disease arose from ulcerations of the intestines; others, that the fever produced the ulcerations; others, that a combination of causes produced the disease.

Dr. Henry Jones remarked, that a distinction must be made between typhoid symptoms and the specific disease typhoid fever.

Dr. Prince said that Dr. Woodward had advocated the existence of a typho-malarial fever, which yields more readily to quinine, and this remedy is usefully employed where it could not be in typhoid fever.

Dr. Edgar suggested that flatus was a triumph of chemical over vital causes. A bougie might be employed to relieve it, but, as suggested by Dr. Samuel Adams, care should be taken to place the patient upon the right side during the process. He had used pills of nitrate of silver as a remedy in ulceration.

Dr. H. K. Jones, of Jacksonville, and Dr. Kimber, of Waverly, were appointed for essays at the next meeting.

At 5 o'clock P.M., the Society adjourned, to meet on the second Thursday in January, 1868.

C. T. WILBUR, M.D., *Secretary.*

Society met at 2½ o'clock P.M., at the Court House in Jacksonville, on Monday, January 9th, 1868.

Dr. S. S. Nesbitt, of Virginia, Cass County, was elected a member of the Society.

Dr. Henry Jones reported a very rare case, which had

recently occurred in his practice, and was requested by the Society to send the same to some medical journal for publication, as a contribution from this Society.

Dr. H. K. Jones, who was the appointee for the regular exercises of the day, read an interesting essay on the Function of the Spleen, and was also requested to contribute the same to some medical journal, as an emanation from this Society.

Dr. Edgar remarked that the essay was very interesting to him, by reason of its connection with the topic of the last month—for Dr. Bennett, of Edinburgh, had observed that the spleen was larger and more often diseased in typhoid fever than any other organ. Dr. Bennett's definition of typhoid fever is, "an essential disease, dependent upon some unknown constitution of the blood, the local lesions being consequential." In two fatal cases that were carefully observed by Dr. Bennett, no rose-colored spots were found. That seven out of sixty cases exhibited no lesions of structure, on *post mortem* examinations. The spleen was more constantly affected than any other organ of the body. He tried quinine, as a remedy, in eighteen or nineteen cases, and concluded that it could not be relied on.

Dr. Prince thought that typhoid fever might arise from air-poisoning, by the reconsumption of emanations from the body.

Dr. Henry Jones said that he did not think that the authorities and opinions offered by Drs. Edgar and Prince warranted us in discarding the old recognized ideas in relation to typhoid fever. I believe that we should occupy this ground: that it is an essential disease, produced by a particular agent; that the lesion of Peyer's glands are the almost invariable expression of the disease; and, also, that almost always appear the rose-colored spots.

Drs. Kellogg and King were appointed essayists for the next meeting.

At 5 o'clock, adjourned, to meet on the second Thursday of February. C. T. WILBUR, M.D., *Secretary.*

Selections.

A SPRING AND SELF-RETAINING SPECULUM.

By NATHAN BOZEMAN, M.D., New York.

The vagina, as a membranous canal, in the distended state, may properly be said to represent a truncated cone with the base turned upward and the apex downward, corresponding with its mouth.

The general outline of the organ, as viewed in its natural condition, is such as would result from bringing the two opposing walls of the cone together, the cervix uteri being encircled by it at the centre of its base, and its mouth closed by the falling together of the labia majora.

The line, therefore, formed by the anterior and posterior walls of the organ coming together is transverse, while that formed by the opposing surfaces of the labia is antero-posterior, being at right angles.

Now the most natural indications for the dilatation of this canal with the peculiarities named would appear to be, first, separation of the labia, and, second, the two opposing walls of the collapsed cone, so to speak. This, scarcely need I say, is the view generally taken of the relationship of these parts, and the usual practice is based upon it of bringing within the field of observation the cervix uteri and the two vaginal walls.

This plan of antero-posterior dilatation of the vagina, it matters not what form of speculum is used, I conceive to be a popular error, and it is wholly at variance with the true anatomical relation of the parts. I shall, presently, attempt to explain more fully my meaning in our description of *a new form of speculum*, which I have the pleasure of presenting now to the notice of the profession. The principle of construction, as well as principle of action of this new instrument, will be found to differ from all others heretofore in use, in several respects, which I shall explain farther on. Suffice it to say, one of the very essential differences is in what might be termed the working point of the instrument, that portion which is applied to the resistance. The blades of our instrument are introduced between the opposing walls of the vagina edgewise, instead of flatwise, as formerly; and the dilatation is effected transversely or horizontally, as will be better understood when we come to

explain the principle of action. The same instrument applies to the dilatation of the vulva as well as the vaginal canal; thus giving us, at one glance, a view of the parts from the mons veneris to the cervix uteri in front, and behind, nearly the whole of the posterior wall of the vagina—any and every point within this extensive range being accessible for operative purposes.

The dilatation thus effected is so regulated that the labia and the two extremities of the vagina are put upon the stretch only to the extent desired, which is in strict accordance with the anatomical conformation of the parts, this being of such a nature as to make the instrument *self-sustaining*, one of its peculiarities; another being *elasticity of flexure*. This principle of elasticity has never before been embodied in any form of speculum that I am aware of, and its utility and importance, in my judgment, cannot be too highly estimated. Instead of the hard, inflexible blade formerly used, touching only at one or two points soft and delicate structures, we have now the soft, elastic spring adapting itself to all the points of resistance with a uniformity to be attained in no other way.

The indications for complete dilatation of the vagina and vulva I conceive to be four:

1st. Elevation of the perinæum.

2d. Elevation and support of the upper part of the posterior wall of the vagina.

3d. Transverse dilatation of the labia majora and the mouth of the vagina.

4th. Distension and steadiness of the upper part of the anterior wall of the vagina, the vesico-vaginal septum.

Now these are the indications to be fulfilled, according to my judgment, independent of any and all efforts of the patient to the contrary; and any instrument, whether *self-retaining or not*, that does not meet these ends, must be regarded as incomplete. With my instrument, I claim the accomplishment of all, *the fulfilment of the third and fourth indications* being an advance beyond all other methods, to say nothing of the *self-retaining* quality of the instrument, which, it must be admitted, is based upon more correct principles than any plan heretofore presented to the notice of the profession.

As regards the position of the patient, I propose a few remarks before entering upon the description of our instrument, as I consider this of no little consequence in certain operations, especially those upon the anterior wall of the vagina.

While our speculum is equally well adapted to all positions,

I prefer, in the description and application of it, to consider the patient resting upon her knees and breast, the body forming a right angle with the thighs, and the thighs a right angle with the legs. This position I now prefer to all others, and, with propriety, it may be termed the *right angle position upon the knees.*

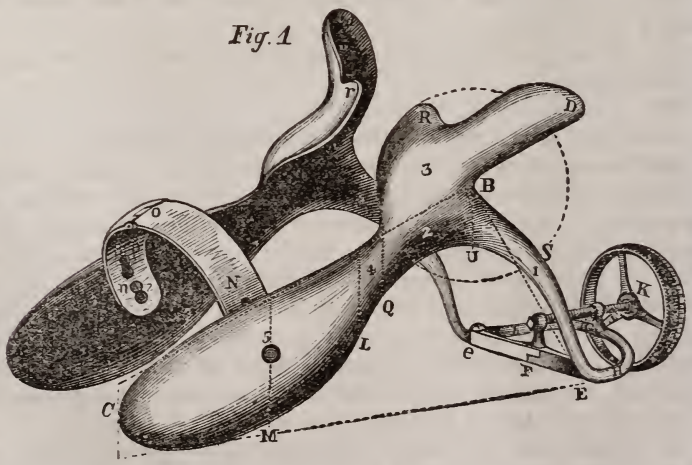
In no other position, according to my judgment, whether chloroform be used or not, can the patient be made so easy, comfortable, and secure, and without the aid of assistants. Our supporting frame, when folded up, is compact, light, and portable, and weighs only eleven pounds. It exceeds twelve inches in height, only on one side, the depth and width being twelve by eighteen inches. I hope before long to be able to publish a description of this *thoracic rest* or *support.*

We have come now to the most difficult part of our task, a description of this speculum.

Fig. 1 (half size) represents a front quarter view of the instrument, expanded, as when introduced for use.

The general features of it, as shown, are outstretched arms, expanded wings, rolling surfaces, standing and projecting arches, broad, contracted, narrow, and rounded points; and the thumb-screw arrangement indicates that the whole is moved by a system of leverage.

Fig. 1



The proportions of the instrument, are, I think, in harmony, and the construction will be found to be in strict accordance with well-known geometrical principles. It may be said to be

composed of two simple, similar bent steel levers, about 8½ inches in length, rounded and flattened at certain points, having elasticity of flexure, and connected at one extremity by a pivot-joint, around which they revolve horizontally.

For description, therefore, as is most naturally suggested from its general outline, it may properly be divided into the foot and heel, including thumb-screw and short levers, and into the legs, body, wings, neck, and arms or blades, as indicated by Figs. 1, 2, 3, 4, and 5.

The description of the foot and heel we will defer until we come to study the principle of action.

I shall consider B the centre of the instrument; the plumb line U, dropped from it, the balancing-point.

The legs, where they leave the heel E and *e* are rounded, a-quarter of an inch in thickness, and for a short distance ascend almost perpendicularly, inclining slightly forward and inward. In the next part of their course they become gradually more and more flattened, extending now almost directly forward, only inclining slightly outward.

The line U indicates their union with the body. Their length is two inches and three-eighths. This part of the instrument applies to the purpose of dilating the vulva or labia majora. The lower part of the legs falls just within the fold formed by the inner part of the thigh and the labia, while the upper portion passes between the latter about the commencement of the nymphæ, and thus reaches the mouth of the vagina, which corresponds exactly with the plumb line U, the balancing-point.

The body is included between the two lines U and Q, and is somewhat quadrangular in shape, rounding on its outer surface, and hollowed out on the inner side to the same extent as the upper part of the leg and the wing standing upon its upper edge, as indicated by the line B Q. This part of the instrument is applied directly to the transverse dilatation of the mouth of the vagina. The wing is of a peculiar shape, and, for the sake of description, may be divided into the lower and inner portion, and the upper and outer portion. The first part presents a rounded surface from right to left, and up toward the projecting angles R *r* looks almost directly forward. These projecting arches are about three-quarters of an inch wide, and at the angles are about one inch above a line drawn across from centre to centre. This part of the wing, with its fellow of the opposite side, gives support to the perinæum, which lies across from one to the other, just as the bridge spans the stream.

The upper and outer portion of the wing looks forward and outward, and is intended to support the buttock. The neck, between the two plumb lines Q, L, is about half an inch in length and width, and, as shown, is the most contracted part of the arms. This point comes just within the mouth of the vagina, and, consequently, prevents painful stretching of the parts here in the expansion of the blades.

The arms or blades form the widest part of the instrument, and are intended to distend and steady the vesico-vaginal septum. They are thin, spoon-shaped, about two inches and three-eighths in length, and at M one and a-half inches wide. On the middle of this line is seen the countersunk head of the rivet which passes through here and gives support on the inside to the extremities of the arch N *n*, connecting the blades at this point. This arch is four and a-half inches in length, connected in its middle by a hinge-joint O, and about three-quarters of an inch in width. It should be made of steel, and so thin between the joint and extremities as to allow of easy bending in the opening and shutting of the arms. There are two holes near each end, with slits in the upper edge, to encircle the narrow neck of the rivet when in use. This arch may be used or not, as circumstances may require, it being easily slipped off or on. When used, it is intended to elevate and support the upper part of the posterior wall of the vagina, it being the fulfilment of our second indication. It is easily elevated or depressed with the finger, and when in position stands about one inch above the edges of the blades, and on a plane slightly above that of the projecting angles of the wings R *r*. Nearly the whole of the instrument, as will be seen by reference to the figure, is included within the legs of the right-angled triangle E B C, only the foot, legs, and wings being outside. The circle D R Q S has its centre at B, the centre of the instrument, with a radius of one inch and a-quarter, the length of the line of union between the root of the wing and the body. This circle, as is seen, includes nearly the whole of the wing, the body, and a large part of the leg. This angle and centre of circle, I should observe, are important points to be borne in mind in the manufacture of the instrument. They should be preserved in all cases, it matters not what change may be found necessary, as regards proportions.

The instrument, when set upon a table, has its foot flat upon the surface, touching nowhere else excepting at the point near the ends of the blades, as indicated by the base line of the angle E C, which measures four inches and three-quarters.

The leg E B measures two inches and three-quarters, and C B four inches and a-half.

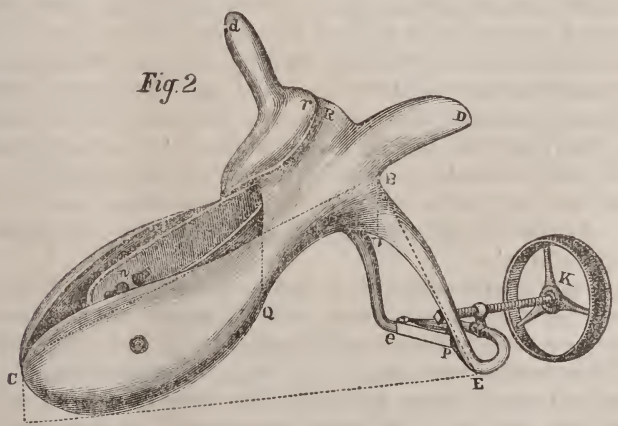
From centre B to corresponding point of opposite side, the distance is two inches and a-quarter. Between tips of wings D *d*, four inches and a-quarter. Between commencement of neck Q, three inches. Between blades at M, measuring from outside to outside, four inches. Between points, measured in the same way, three inches and a-half.

The instrument is to be made of steel, electro-plated, as light as is consistent with the strength required, there being certain points, of course, where this is an important feature; for example, the foot and heel of the instrument.

The *elasticity of flexure*, it should be borne in mind, extends only from the heel to the extremities of the blades, increasing, of course, in extent as the latter points are approached. The limit of elasticity at the points of the blades should not exceed three-quarters of an inch under any amount of resistance here, and this should be borne in mind in *tempering* the instrument, otherwise the limit might be exceeded, and the usefulness of the instrument thereby endangered.

Fig. 2 represents the instrument closed, ready for introduction or withdrawal. It being collapsed, so to speak, every point of the opposing sides is brought into closer relationship. The elevated arch standing above the edges of the arms or blades, as seen in the first view, is now folded within them, the upper part of it resting beneath the hugging arches, R *r*.

Fig. 2



In this view of the instrument, there are three divisions made by the two plumb lines U and Q, which are important, as di-

recting attention to the uses of the respective portions. The leg, for example, included within the first division, performs the part of separating the *labia majora*. The wings and body of the second division elevate the *perinæum*, and open the *mouth of the vagina*, to the utmost limit transversely. The arms or blades of the third division *unfold* and *steady* the *vesico-vaginal septum*, or upper part of the anterior wall of the vagina, and at the same time give support to the two extremities of the arch which spans the space between them, and receives upon its top *the falling posterior wall of the vagina.*

The thumb-screw K is seen reversed to its fullest extent, and the two short levers quietly folded within the foot of the instrument, the point P being now in close proximity to the pivot G.

We come now to a consideration of the principle of the instrument, and, I will state in the outset, as thus applied, it is new and original with myself, it never having been applied before, that I am aware of, by any one, to the purposes of a speculum.

The principle itself, however, is an old one, as regards its application to other purposes. It will be familiar to those who may have seen a certain kind of *cotton press* in the Southern States, in which it is employed, though with a more extensive system of leverage than I have here. I got the idea myself from seeing the above application; and the credit I am entitled to is the modification which I have made of it, to suit the purposes of a *self-retaining* speculum, the principle of which we will now attempt to describe. This principle, as here applied, I have no hesitancy in saying, forms one of the most beautiful illustrations of the parallelogram of forces as producing curvilinear motion that could be conceived, and answers, in the most satisfactory manner, the purpose for which it is here intended.

In studying the law of forces, there are several important points always to be borne in mind, whether applied to the rudest lever or pulley, or to the most complex piece of machinery. As these points are or are not understood, depends success or failure.

Professor Silliman,* who is authority in matters of this sort, says: "To determine a force with precision, we must consider three things: 1st. The point of application. 2d. The direction. 3d. The intensity or energy with which the force acts."

Inattention to one or more of these rules has, I am satisfied, caused the failure of all previous efforts at getting up a *self-*

* Principles of Physic.

retaining speculum, to fulfil all the indications previously named. I am free to confess myself that I failed in many of my efforts from this very cause.

My greatest error I now conceive to have been in the point selected for the application of force. Had I the time and space, it might be interesting to show how I labored to extricate myself from this difficulty; but, as it is, I shall be content for the present with saying that this instrument, as here exhibited, is not the work of a day, or a week, or a month, but years of patient thought and repeated disappointments.

Let us now turn our attention to the diagram, Fig. 3, which is also a half-size front view of what I have denominated the foot of the instrument, here represented closed and expanded, with both legs cut off at the heel E and E.

The two sides E *h* G together form, as is seen, almost a semicircle, with a radius of one and a-quarter inches. In the middle, where they unite, is the pivot-joint G, and here is the point of our application of force.

These arms are inflexible, somewhat round, and almost of uniform thickness, not exceeding a quarter of an inch anywhere, excepting at the pivot and ends, where they swell out a little, to give additional strength.

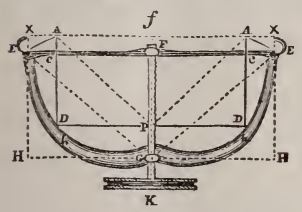


Fig. 3.

Within these arms is situated our plan of leverage for opening and shutting the instrument. This consists of a double-threaded thumb-screw K, about one inch and three-quarters in length, and three-eighths of an inch in thickness, with an open wheel on the outer end, one inch and an-eighth in diameter; and of two short, stout levers, one and a-quarter inches long. These latter are connected at one extremity by a joint at the heel E and E, two and a-half inches from the pivot G. At the other extremity, they are connected together by a joint at P. Rising above, three-eighths of an inch, is to be seen the connecting screw of this joint, expanded, and perforated to receive the extremity of the thumb-screw, upon the extremity of which, on the outside, is placed a small tap. In the same manner, the thumb-screw passes through the connecting pivot-screw G, which is the nut, the former being free to move both forward and backward.

Let the two lines now on each side, A D and P D, represent the instrument closed, A *f* and P *f* completing the rectangle or

square. The diagonal P A will then represent the situation and relationship of the two short levers previously described.

To open or expand these arms now to the full extent, we have, as would appear, two forces, A P and A P, acting at an oblique angle, a very great mechanical disadvantage, as will be readily understood, for, "when a force acts upon a body at any other than a right angle, a part of its effect is lost."

The difficulty, however, is overcome, and the accomplishment of our purpose rendered easy, by resolving each of these oblique forces into two, P *f* and A *f*, one parallel and the other perpendicular to the point to be moved. This is effected by revolving the thumb-screw K until it assumes the position of G F, and the short levers that of E F and E F. The latter together now form a straight line—a relationship that places the whole instrument in a state of equilibrium; the weight of the two sides, being equal, is exactly counterpoised at F. Complete now the parallelogram E H G, and we have the diagonal G E, the resultant of the two components thus applied, which give us the diagonal or oblique relationship of the arms of the instrument which is here so beautifully carried out. In this resolution of forces, therefore, our power is seen to pass through the arc of a circle which is the diagonal of the small parallelogram A *c*, E *x*, the distance A E being three-eighths of an inch. As it is with the seat of power, so it is with every other part of the instrument to the extremity of its blades, which, with varying radii, passes through the arc of the part of a circle, the length of which, as well as the velocity, increasing with the distance from the pivot G.

For instance, at the centre or balancing-point of the instrument, U, Fig. 1, corresponding to the mouth of the vagina and about one inch from the seat of power, we have the arc increased from three-eighths to half an inch, with a total expansion of the arms at this point of two and a-half inches. And at the extremity of the blades, a distance of about five inches from the same point, the arc is increased to one and a-half inches, giving us a space between the opposing blades of three inches for operative purposes.

At the two points named, the limit of expansion of the blades corresponds exactly with the limit of the dilatation of the mouth of the vagina, and its upper extremity, which alone is sufficient to explain the *self-sustaining* and *self-retaining* feature of the instrument.

In the application of our power then to the thumb-screw K, the position of it is most advantageous for producing its maxi-

mum effect in collapsing or carrying the two short levers from their oblique relationship to that of right angles with the point acted upon, thus affording an example of increased power with increased resistance. The instrument with the above system of leverage may properly be said to represent a *double bent lever*, the most familiar example of which is the *fire-tongs*. Unlike these, however, it has the power applied on the inside instead of the outside. Alike, though, in the important respect of having the power applied between the fulcrum and the weight or resistance, distinguishing both at once as levers of the third class.

This instrument I shall call the *spring and self-retaining speculum*, as is most naturally suggested from these two distinguishing qualities of it.

I think I may justly claim for this speculum originality in:

1st. The system of leverage employed, possessing, as it does, regulated and increased power, reduced to the smallest possible compass, and far away from the mouth of the vagina, thus allowing the freest and widest range of manipulation with instruments, compatible with the nature of these parts.

2d. Transverse action of the instrument, with uniformly varying movement of the working-point, extending from the heel to the point of the blades, thus making the lateral walls of the vagina the seat of pressure instead of the anterior and posterior, as formerly.

3d. Complete exposure, at the same time, for operative purposes of the vulva, both walls of the vagina, and the cervix uteri, with the two polished surfaces of the arms of the instrument standing upon the sides, the most favorable position in which they could be placed to secure the greatest amount of reflected light.

4th. Elasticity of the working-point of the instrument.

5th. Being self-retaining in the fullest sense of the word.

6th. Being equally applicable in its use to all positions of the patient.

7th. Allowing all operations to be done without the aid of assistants, or exposure of the person of the patient, further than the parts immediately brought within the field of observation by the expansion of the arms of the instrument.

All of these points, I am safe in saying, admit of the clearest demonstration.

Remarks.—Having now completed the description of our *spring and self-retaining speculum*, it remains for us to offer a few additional remarks upon its application in practice, and the

circumstances under which it was first done; for it is reasonable to conclude that the question will be asked, where is the proof of all the advantages which have been portrayed at such length?

The only proof I propose to offer, and I think this conclusive, is the application of the instrument in a single case, the very one to which it was adapted in completing it as here shown. This case being an extreme one, as will appear, has the advantage, I think, of rendering the proof convincing to the practical mind, and lessens the necessity, I conceive, of additional corroborative testimony to satisfy even the most skeptical. The case referred to was one of vesico-vaginal fistule, occurring in a very stout, fleshy woman, weighing upwards of two hundred pounds. Early in October last, she was admitted into that admirably conducted institution under the direction of the Sisters of the Hoboken St. Mary's Hospital, where my patients are now received.

The fistule was of six or eight months' standing; small, not larger than a pin's head, and occupied what we would ordinarily term a favorable position, being some three inches above the *meatus urinarius*, and near the edge of the septum, upon the left side.

The peculiarity and difficulties of the case were these: Anteversion of the uterus; a convoluted or folded condition of the two opposing walls of the vagina, which was of immense size; and a pleated condition of the edges of the fistule, and the parts immediately surrounding it.

Assisted by Drs. Finnell, Connolly, Lynch, Metcalfe, and several other medical gentlemen of New York, and Dr. Chabert, of Hoboken, I undertook my usual operation, the patient resting upon her knees and elbows. My fourth size of the lever speculum, with a blade four inches long, one and a-half inches wide at the heel, and one and three-quarter inches near the point, was employed; and, although of such large size, this instrument, with spatulas and depressors, brought to bear from various points by assistants, afforded us only an imperfect view of the very small fistule. The upper part of the posterior wall of the vagina came down in such immense folds over the end of the instrument, met by the same folded and protruded condition of the anterior wall, under violent and almost continuous expulsive efforts, that it became quite impossible to commence the process of paring the edges of the fistule, and to complete it in a regular manner. This stage of the operation, however, was gone through with after the length of time indicated, only

to be followed by a still greater difficulty and delay in the next —the introduction of our sutures—only three being called for. The patient, at this stage of the operation, was placed upon her side and chloroformed, which, however, afforded us no relief from the surrounding difficulties.

Suffice it to say, the operation, after three hours, with five or six assistants, was finished, though in the most unsatisfactory manner it had ever been my misfortune to encounter before.

Now, after all our labor and annoyance, I felt that a failure was inevitable, and so expressed myself to the gentlemen present. The removal of our suture apparatus, on the eighth day, proved too truly the correctness of our misgivings as to the final result. There was a total failure.

With a full understanding now of the difficulties of the case, and seeing the result of the extraordinary efforts which had been made in this operation, I contemplated, I frankly confess, another operation with dread and ill forebodings.

I determined, however, that I would not undertake another until I could devise some plan of securing the patient effectually in the right-angle position upon the knees, which I had had in contemplation for several years; and, if possible, to complete my new speculum, believing that no better case could be found to test its merits. Accordingly, I drew a plan of my *thoracic rest*, alluded to in the former part of this paper, and placed it in the hands of a carpenter, who had it ready for use in five or six days.

As to the speculum, this was not so easily completed, as it involved a radical change in my original plan, arising from a fundamental error in its construction, which I had not discovered until this particular juncture. An explanation of this change would necessarily require a description of the instrument and all the alterations made in it from the beginning, which would far exceed the limits assigned to these remarks in the outset.

On the 20th of November it was so near completed as to enable us to use it.

The patient was now placed in our new position, and thus secured upon the *thoracic rest.* The position was now found to be admirable, and the confinement of the patient perfect.

Chloroform was next administered, and our speculum, as here shown and described, was introduced and expanded to the fullest extent. A reference to the limit pointed out on a former page will give some idea of the enormous size of the vagina. In short, the dilatation of the vagina, regarding all the indica-

tions which we have pointed out, was most complete and satisfactory. The insignificant fistule which we had labored so hard to bring into view a few weeks before and failed, now showed itself in its fullest dimensions, steady and immovable, even in the very face of the most violent expulsive efforts of the patient from bearing down and vomiting, before which we stood almost powerless and helpless in the previous operation, with every assistant that could be employed.

I now viewed the parts of operative procedure, for the first time, with a feeling of certainty as to the result. At my leisure I began the operation, and quietly completed it by my ordinary method, without the aid of an assistant, further than to wash sponges and give chloroform.

In twenty-five minutes our patient was removed from the table and placed in bed, totally unconscious of what had been done. Ten minutes of this time, I should observe, were lost in consequence of a little hemorrhage which had to be controlled before introducing our sutures.

Thus was achieved, I conceive, the greatest triumph of our professional life.

The above operation was done in the presence of Drs. Thos. C. Finnell, Thomas S. Bahan, Joseph S. Crane, of New York, and Dr. Chabert, of Hoboken, all of whom expressed their entire satisfaction at the result.

To Dr. Finnell, I am under many obligations, for having so opportunely placed under my charge the above patient, so well adapted to the completion of our instrument. Without such an opportunity, our success might have been deferred many months longer. There are also due Dr. Chabert, many thanks for his kind attention to the patient during the after treatment.

The result in this case, however satisfactory it may be viewed in the important respects mentioned, merits additional interest, I think, from the fact that the instrument actually employed in the case, and from which these drawings have been made, was completed by my own hands in *gutta percha, sheet lead, and iron wire.* To Messrs. Geo. Tiemann & Co., 67 Chatham St., however, I am under great obligations as regards the foot, leverage, and legs of the instrument, and the many changes and alterations made from time to time, in order to reach this stage of completion. They placed at my disposal an experienced and finished workman, who made and put together almost every part of the instrument above named under my own supervision. Without this very great advantage, I never could have gone through with the work, even to this extent.

As regards the ultimate success of this instrument, from what we have seen thus far in its application, I think I can very confidently recommend it to the general practitioner, as well as the surgeon, as likely to give satisfaction in all cases where a speculum requires to be used.

That a diminution of the size of the instrument shown here will have to be made to suit the majority of cases, I am convinced. This is an extra large size. A medium size, I think, will cover four-fifths of all cases; one smaller size, and a larger one, such as here shown, covering the other fifth of the cases. In this last class, we include such cases as the one above detailed, and all cases with shortening of the vagina, resulting from injury of its walls or otherwise. As soon as we can determine properly the alterations necessary to be made in the proportions of this instrument, in order to reach the other two sizes, we will have them made.

The instrument, when completed in steel and electro-plated, as designed, will not, I am satisfied, exceed the weight of this, our original pattern, which is only eight ounces, being two ounces less than the ordinary lever speculum.

Fifth Avenue Hotel.

ABSTRACT OF A CLINICAL LECTURE ON THE PATHOLOGY AND TREATMENT OF THE TYPHOID STATE IN DIFFERENT DISEASES.

By CHARLES MURCHISON, M.D., F.R.S.,
Physician and Lecturer on the Practice of Medicine at the Middlesex Hospital.

I propose in the present lecture to direct your attention to several cases of disease, widely different in their nature, but in all of which there has been a similar group of symptoms, constituting the condition ordinarily known as the "typhoid state."

Case 1.—William D., aged 23, admitted Oct. 26th, 1866, on the seventh day of an attack of typhus fever, with well-marked eruption; a dry, brown tongue; great delirium and restlessness, and signs of congestion of the lungs. Marked improvement on the fifteenth day. On the eighteenth day, return of the febrile symptoms; an inflammatory swelling over the left parotid, and albumen in the urine. On the nineteenth day, frequent attacks of convulsions, which continued to recur until death by coma on the twentieth day.

After Death.—Blood dark and fluid; great hypostatic congestion of lungs; spleen large and soft; kidneys presenting the characters of a recent acute nephritis. A large quantity of clear fluid, containing urea, beneath the arachnoid, and in the lateral ventricles.

Case 2.—John F., aged 27, admitted Dec. 3, 1866, on the ninth day of an attack of typhus, with well-marked eruption; a dry, brown tongue, and albumenuria. On the thirteenth day, violent delirium, followed by stupor, floccitatio, and involuntary evacuations, which continued until death on the seventeenth day. No convulsions.

After Death.—Blood dark and fluid. Extreme hypostatic congestion of both lungs, the two together weighing sixty-eight ounces. Both kidneys greatly enlarged, weighing together fifteen ounces and a-half, their surfaces smooth, and capsules non-adherent, their cortices extremely congested, and the tubes gorged with granular epithelium. Much clear fluid, in which a considerable quantity of urea was detected, at the base of the brain, and in the lateral ventricles.

Case 3.—John S., aged 44, admitted into the London Fever Hospital, on Oct. 12th, 1863, on the seventh day of an attack of typhus, with copious eruption. On the ninth day, acute delirium, followed by stupor, complete unconsciousness, low muttering delirium, and involuntary motions. On the thirteenth day, urine very scanty and smoky, containing epithelial and blood casts. During the following night, a fit of convulsions, lasting a-quarter of an hour, and death by coma half an hour afterwards.

After Death.—Blood dark and fluid. Extreme hypostatic congestion of the lungs. Spleen large and soft. The two kidneys together weighing fourteen ounces and a-half, their capsules separating readily, and their cortices quite smooth, but very friable, intensely congested, with blood dripping in large quantity from the cut surface; all the uriniferous tubes gorged with opaque granular epithelium, and many of them containing extravasated blood. Much clear fluid in the lateral ventricles and at the base of the brain, which was not examined for urea.

Case 4.—James P., aged 73, admitted Nov. 13th, 1866, with an eruption of pemphigus over the greater part of the body. Many years before he had suffered from "typhus," and from a rheumatic attack, but he had never had dropsy. Two years before, the eruption had appeared on his legs, and within the last three months it had spread over his body. Two or three days after the patient's admission, he became very restless and

delirious at night; his tongue was dry and brown, and coarse moist *rales* could be heard over the back of the lungs; the urine was scanty, but though examined repeatedly, contained not a trace of albumen, and there was no dropsy. Death by coma occurred on November 21st.

After Death.—The blood dark and fluid. The kidneys contracted and granular, their capsules firmly adherent, and their cortices having well-nigh disappeared. Œdema and hypostatic congestion of the lungs. Much clear fluid, containing urea, at the base of the brain, and in the lateral ventricles.

Case 5.—John K., aged 49, admitted Oct. 27, 1866, with a gangrenous ulcer of big toe, the result of an injury, jaundice, and albuminuria. About Nov. 15, the patient became very restless and delirious at night; the tongne was dry and brown; there were signs of hypostatic congestion of the lungs; and the gangrene began to spread up the leg. On Nov. 20th, convulsions occurred, and, after about twenty fits, the patient died comatose on the 21st.

After Death.—The cause of the jaundice was ascertained to have been catarrh of the bile-ducts, from irritation of the calculus. Both kidneys were enlarged, and presented the characters of a contracting fatty kidney. Blood dark and fluid. Marked œdema and hypostatic congestion of both lungs. The fluid in the lateral ventricles, and at the base of the brain, was found to contain urea.

Case 6.—James McW., aged 42, admitted Oct. 15th, 1867, with symptoms of gangrene of the bladder, succeeding those of the passage of a renal calculus. On Oct. 26th, a rigor, followed by fever, with dry, brown tongue, restlessness, and delirium at night, signs of congestion of the base of the lungs, and death, after an attack of convulsions, on Nov. 7th.

After Death.—Gangrene of the bladder; great dilatation of the right ureter. Sacculation of the right kidney, with complete destruction of its secreting tissue; numerous small abscesses in the left kidney. Congestion of the lungs. A considerable quantity of clear serum, containing urea in the lateral ventricles, and at the base of the brain.

Case 7.—Henry P., aged 28, admitted Sep. 13, 1866, with all the ordinary symptoms of rheumatic fever in an intense degree, which had lasted about ten days. There was no cardiac complication. On September 17th, he became suddenly worse; he was heavy and stupid, and could scarcely be roused; the urine was loaded with lithates, but contained no albumen; the tongue was dry and brown; there was now faint pericardial

friction. On the following day he became violently delirious; the temperature was 107° Fahr., and at 5 P.M., he died comatose. An hour before death, the temperature was found by Dr. Murray to be 110 2° Fahr.; indicating an unusually rapid disintegration, or combustion of tissue.

After Death.—Blood dark and fluid. A thin layer of recent lymph over surface of heart, but only half an ounce of fluid in pericardium. Both lungs exhibited in a marked degree the characters of hypostatic congestion, as seen after death from typhus. Spleen ten and a-half ounces, soft and pulpy, like a "typhus-spleen." Both kidneys enlarged and hyperæmic, weighing together twelve ounces and a-half, but surfaces smooth, and capsules separated readily. No fluid in cerebral ventricles.

In this case the products of tissue-metamorphosis, as indicated by the high temperature, were probably in too large quantity for healthy kidneys to eliminate.

Case 8.—Esther P., aged 26, admitted Nov. 5th, 1867, with febrile symptoms, a dry, brown tongue and violent delirium. She had been ill for five days before admission, and presented all the symptoms usually observed in a bad case of typhus fever; but, on examination, no eruption could be discovered on the skin, and though there was scarcely any cough, there were all the physical signs of pleuro-pneumonia from base to apex of the left lung, and also at the right base; the urine contained a considerable quantity of albumen. For four days the patient seemed to get worse; she had no sleep, was extremely delirious, and was with difficulty kept in bed; but at the end of that time, an improvement commenced, both in the symptoms and in the physical signs of the lungs; the albumen entirely disappeared from the urine, and on the 6th of December, the patient left the hospital well.

In the cases now submitted to your notice, the group of symptoms known as the "typhoid state" was the same, notwithstanding the varying nature of the primary maladies. These symptoms are a quick, soft pulse; a dry, brown tongue; the symptoms and physical signs of hypostatic congestion of the lungs; impairment of the mental faculties; stupor passing into coma; delirium, which at one time is acute and noisy, at another low and muttering, and not unfrequently associated with muscular tremor; involuntary evacuations, and occasionally subsultus, carphology, or even general convulsions. The precise grouping of the symptoms will vary in different cases even of the same disease, while in diseases essentially different it may be identical.

The *post mortem* appearances met with in such cases are a

dark fluid condition of the blood; hypostatic congestion and œdema of the lungs; old disease or recent congestion, with epithelial engorgement of the tubes of the kidneys; enlargement and softening of the spleen, and, unless the typhoid state have been of very short duration, an accumulation of serous fluid in the lateral ventricals and at the base of the brain, the veins and sinuses of which are usually full of dark blood.

The typhoid state is developed more commonly in true typhus fever than in any other disease that we are called upon to treat in this country; and accordingly, all diseases in which the typhoid state is apt to be developed are constantly mistaken for typhus, so that the cases registered in official returns as deaths from "typhus," furnish no reliable test of the prevalence of this epidemic fever. The cases sent as typhus to the London Fever Hospital, and in fact, to all fever hospitals, from year to year, testify unequivocally to the fact that there is scarcely an acute disease to which flesh is heir which may not in the way pointed out be mistaken for typhus. Next to true typhus, enteric, pythogenic, or the so-called "typhoid fever," is the malady in which the typhoid state is oftenest met with; and this is one reason why it was so long, and is still so often, confounded with typhus. In many cases of enteric fever, it is true, the typhoid state does not appear at all, or only late in the disease, and in the latter case the attack is often, though erroneously, described as "gastric fever passing into typhus." Cases of pneumonia are not uncommon where the symptoms of the local disease are completely masked by those of the general blood-poisoning, in the form of manical delirium passing into coma; and there are few medical men who have not met with examples of acute rheumatism passing into a condition indistinguishable from the typhoid state of the typhus, and presenting similar morbid appearances in the solids and fluids after death. Another class of cases very commonly mistaken for typhus is constituted by certain forms of kidney-disease, and particularly the contracted, granular, or "gouty" kidney. In this form of kidney-disease, the patient may at no period of his life have suffered from dropsy, and the urine may contain only a minute trace of albumen; or, as in Case 4, even none at all. The symptoms ordinarily associated with one's ideas of kidney-disease are absent, and, therefore, when cerebral symptoms supervene, the primary disease is overlooked, and the case is regarded as one of typhus; or, if the attack be sudden or ushered in with convulsions, as one of apoplexy. The "serous apoplexy" of the pathologists of the past age—cases diagnosed as apoplexy during life, but where no apoplectic

clot was found in the brain after death—were probably, for the most part, examples of contracted kidney. As physician to the London Fever Hospital, numerous cases of contracted kidney have come under my notice during the last six years in which the cerebral symptoms—the typhoid state—were indistinguishable from those of typhus, and where, failing in any previous history, the only points of distinguishing from typhus have been the absence of any eruption on the skin, and the fact that the temperature has been but little elevated above the healthy standard, except when some local inflammation has complicated the primary disease in the kidney.

I shall now endeavor to explain to you why it is that a similar state of the system is so often produced in the course of diseases so widely different, and to show, in fact, that the pathology of the "typhoid state" in all diseases is probably identical, whatever be the cause of the primary disease.

To take, first, the cases of contracted kidney, it is now generally admitted that the cerebral symptoms are due to a poisoned condition of the blood. There may be differences of opinion as to whether the actual poison is urea or some compound of ammonia; but for our present purpose it is immaterial to inquire which of these views is the more probable. It is sufficient to know that the blood is poisoned with the products of the retrograde metamorphosis of the nitrogenous tissues, which it is the function of the kidneys to eliminate from the body. The destruction of tissue is not increased beyond the standard of health, but the disease of the kidneys renders them incapable of separating from the blood the normal quantity of the products of that metamorphosis.

Take next, the class of febrile diseases. It is well known that convulsions—a symptom characteristic of an extreme degree of the typhoid state—is not uncommon in scarlatina, and it has long been acknowledged that this symptom is independent of any cerebral lesion, but is due to poisoning of the blood in consequence of inflammation of the kidneys. Convulsions, however, are met with in many other febrile diseases besides scarlatina, I have known them occur in typhus fever a hundred times or more, and I have published evidence to prove that their pathology in typhus is the same as in scarlet fever. The urine contains always more or less albumen; the kidneys after death exhibit traces of disease, old or recent; and in not a few instances (as in Case 1) I have discovered urea in the fluid of the cerebral ventricles. But convulsions, under such circumstances, are only an extreme symptom of the typhoid state. In a large

proportion of cases of typhus, even where no convulsions occur, albumen is present in the urine during the second week of the disease where cerebral symptoms are most apt to appear; and in several cases where death has been preceded for some time by the typhoid state, but not by convulsions, I have found (as in Case 2) urea in the cerebral fluid.

And if this be the pathology of the typhoid state in scarlet fever and typhus, it may fairly be inferred that the typhoid state in all febrile diseases, whether they be due, in the first instance, to a specific poison or to a local inflammation, admits of a similar explanation. As in the contracted kidney, the blood is contaminated with the products of tissue metamorphosis, but the cause of contamination is different. It is now well known that in all febrile disease the disintegration or combustion of the tissue is greatly increased beyond the healthy standard. To this is to be ascribed the increased temperature, which is the pathognomonic symptom of the febrile state, and the rapid emaciation. The products of this increased metamorphosis are mainly eliminated by the kidneys, and appear in the urine. As long as the kidneys are equal to the increased work thrown upon them, the blood is properly depurated, and the typhoid state is warded off. But if the kidneys be unequal to the task, either from the large amount of effete material to be eliminated, from previous disease in the secreting tissue, or from congestion resulting (as it often does) from their increased work, then the blood becomes contaminated, and convulsions or the typhoid state supervene. This explains why albumen so commonly appears in the urine in the course of all acute diseases of a severe form, and why it is so justly regarded as an unfavorable symptom. It also explains why albuminuria is looked upon as a contraindication to any serious surgical operation. The surgical fever which follows an operation is attended by an increased metamorphosis of tissue; and if the kidneys be diseased, the products of the metamorphosis will be retained in the blood, and induce the typhoid state with all its dangers.

If the views now submitted to you as to the pathology of the typhoid state be correct, they furnish material for reflection as to its appropriate treatment. This ought to be directed towards depuration of the blood of the products of tissue metamorphosis, avoiding, at the same time all measures which will irritate the kidneys, and interfere still more with their secreting functions. At the present day, existence of the typhoid state is usually regarded as in itself an indication for liberal administration of alcoholic stimulants. Considerable experience of the typhoid

state in all diseases has induced me to doubt the wisdom of the practice, and from an experimental inquiry at the London Fever Hospital, in which the patients admitted with typhus fever on alternate days have been treated with and without alcoholic stimulants, I am satisfied that the benefits of late years ascribed to alcohol in the typhoid state have, to say the least, been greatly overrated. Before drawing conclusions as to the good effects of alcohol in typhus, it is necessary to watch the course of the disease where no alcohol has been given, and this precaution has too often been overlooked. At the same time you must not go away with the impression that stimulants, in moderation, are injurious in all cases where the typhoid state is present. Not unfrequently this condition is accompanied by great impairment of the heart's action, indicated by extreme weakness or irregularity of the radial pulse, a diminution of the cardiac impulse, and weakness with shortening of the first sound. Under such circumstances, stimulants in moderate quantity are unquestionably of use. It is the indiscriminate administration of large quantities of brandy in all cases of the typhoid state that I am induced to condemn, both from theory and from practical experience. Such a practice, it appears to me, is calculated to prove injurious by irritating the kidneys, and thus impeding the elimination of the products of tissue-metamorphosis with which the blood is contaminated. The administration of stimulants must be regulated by the condition of the pulse and heart, and not by the mere existence of the typhoid state.—*Brit. Med. Jour. Jan. 4, 1868.—Med. News & Library.*

INFANTILE CONVULSIONS.

By JOHN DICKSON, M.D.

Read before the Baltimore Medical Association.

Of all the maladies of infancy, I know of none more serious, or embarrassing to treat, than convulsions. We are summoned in great haste, and arrive out of breath, and find a painful scene of dismay and confusion which requires our utmost tact and composure to lull. We never get *used* to spasms in the sense in which we may become stoically or philosophically calm. The malady is too grave and sudden in its effects, and our responsibility too serious for that. We all know that two or three minutes of tonic spasm, or a few hours of clonic, may destroy life, and how much depends upon the prompt and judicious

action of the physician, both for the child's safety and his own reputation. Unless the case occurs in our own family, or has been attended with premonitory symptoms, we rarely see a spasm in the tonic stage. The violent and sustained contraction of the respiratory muscle stops the breathing, and death results in a few minutes from asphyxia, as in the first stage of epileptic fits, or in fatal cases of laryngismus stridulus. This, fortunately, is a rare occurrence. We generally find the state, which soon succeeds, of alternate retraction and relaxation, either general or partial; and sometimes confined to very few muscles, as those of the face or hand. In severe cases there is violent jerking of the limbs, abduction of the thumbs covered by the contracted fingers, staring or rolling, insensible eyes, with pupils either contracted or dilated, or there is strabismus in the course of the spasm; the head is drawn backward or forward from the beginning, or it is twisted in rotatory movements; the respiration is quick and irregular, producing a sound of choking as distressing to hear as the contracted, livid face is to witness. When clonic spasm continues some hours, and the rapid contraction and relaxation prevent the free egress of the carbonized air from within the lungs, or the admission of enough pure air to renew the blood, both circulation and respiration are arrested, and death must follow.

Even when this is not the immediate result of the spasm, in many instances it occurs within a short time after it subsides, because these vital functions have been so seriously impaired as to preclude respiration, and the patient sinks from the shock—as we have heard mothers expressly say, "they were struck with death from the beginning of the attack."

But, happily, this is not the most common course of convulsions. There is oftener a gradual subsidence of the fit. The spasmodic movements become slower and cease, the respiration is free, and a general calm succeeds. The patient either wakes to consciousness, or falls into a comotose, or, it may be, natural sleep, after which there may or may not be a recurrence of the spasms. Such recurrences are very common, in spite of our best efforts to prevent them, but it is gratifying to know that the danger is not proportionally increased by their frequency. I have seen children have six or seven in the course of the day, and on the following day present no unfavorable symptom or spasm ever afterwards.

Partial spasms present such a variety of forms that I shall not attempt to speak of more than one or two. They may be confined to the superficial muscles only, and to a few of these,

and in such cases, the senses remain intact. I have seen the eye, mouth, and hand of one side jerking, while the sensibility of the child was perfect; and it would ask for milk and drink it, attempting to hold the cup with the convulsed hand and steadying it with the other. Such are the sequelæ of the more severe attacks, and are easily excited in children so predisposed. Sometimes the muscles of the neck are alone effected, and cause rotation or flexion of the head forward or backward. Indeed, single muscles, as well as sets of muscles, in almost every part of the body, may be convulsed, or exhibit movements under peculiar excitement, nervous or fibrile, which closely resemble spasm, and are at times mistaken for such. Certain organs alone may be effected, as the larynx or glottis, and we have a very formidable trouble in laryngismus stridulus. A child may be seized without any premonitory symptoms of dangerous import, with apparent suffocation. His breathing is suspended, his head thrown back, face and lips livid, and, in a few seconds, the spasm yielding, respiration follows, and a sudden gasp for breath, so urgent as to produce a crowing sound; and the breathing goes on naturally. But there are cases so violent from the repetition of these spasms, as to destroy life during the paroxysm, or lead to general convulsions and coma. Marshall Hall calls this affection "an excitation of the true spinal or excito-motory system." It originates in the trifacial in teething; in the pneumogastric in over or improperly fed infants; in the spinal nerves in constipation, intestinal disorder or catharsis. These act through the medium of the spinal marrow, and the inferior or recurrent laryngeal, the constrictor of the larynx, and the intercostals and diaphragmatic, the motors of respiration." We can judge from this that a great variety of causes, as in general convulsions, may produce this form of spasm. Dr. West mentions a case in a child only ten weeks old, from improper feeding; another, of nineteen months, from sudden suppression of chronic diarrhœa; another, of two and a-half years, from cerebral congestion following constipation; another, of nine months, during the course of chronic hydrocephalus; and in another, who died at the age of two months, it appeared as a transitory symptom during a series of convulsive attacks, for which no cause could be assigned during life, and which left no traces that could be detected after death.

The obscurity of origin and absence of pathological indications often throw a veil of mystery over cases of convulsion, which the clearest sighted of us cannot penetrate. We know that hereditary influence is the most frequent predisposing cause,

that eclampsia in the mother before parturition, or much further back, when she was herself a child, is apt to be followed by the same tendency in the offspring; though it by no means follows so often as to establish it as a rule.

A remarkable illustration of hereditary influence is quoted by Trousseau from a thesis of Dr. Duclos, of Tours. The case is that of a woman, thirty-four years of age, who had had frequent attacks of eclampsia up to the age of seven. These had left behind slight deviation of the mouth and ptosis of the left upper eyelid. This woman had ten children, who all had convulsions; six had died, five in the first two years, and one when three years old. Three months previously, she had a first attack, which lasted about ten minutes, and which her mother ascribed to her having given the breast to the child immediately after a fit of passion, as the convulsion occurred on the ensuing day. Death took place three months afterward, from cerebro-meningitis.

Loss of blood, whether in direct hæmorrhage, venesection, diarrhœa, or hypercatharsis, strongly predisposes to convulsions. Insufficient nourishment and exhaustion, from whatever cause, have the same effect. Hippocrates' observation that the "blood is the moderator of the nerves," corresponds with the present physiological law, "that in proportion as the nutritive and vegetative functions are feeble and languishing, nervous phenomena are mobile, exalted and irregular." The sensitive brain, with its spirit-like nerves prevading every part of the organism, must be supported by the vascular system, as the string and wind instruments of an orchestra combine; the measured wave sounds of the latter, giving volume and tone to the tender strains of the former, without which it would be only a flutter of distracting discord. The iron of the blood is as much a fundamental base in toning the system, as the brass instruments are in sustained musical harmony. It may be upon this theory that Chapman uses ice bags along the spine in so many affections where nervous symptoms predominate. "He considers that ice applied along the spine increases the general circulation, stops the cramp of voluntary and involuntary muscles, proves an effective remedy in epilepsy and other convulsive affections, cures sea-sickness, restrains the sickness of pregnancy, arrests diarrhœa, recovers patients from the cold stage of cholera, and, finally, promotes menstruation. On the other hand, heat along the spine lessens the general circulation, overcomes congestion in all parts of the body, lessens fever, restrains hæmorrhage and lessens or arrests the menstrual flow." If by exciting or depressing the spinal cord, by heat or cold, such

remarkable effects can be produced upon the circulatory system, we can readily see how disorders of the latter may prove disastrous to the nervous system. To work out this would be very interesting, but would require more time than I can give it. The fact is, that every thing that impedes or arrests healthy circulation, or impairs the quality or quantity of the blood, may tend to bring on convulsions, and may be ranked among the predisposing causes. The exciting causes of convulsions are very numerous, and upon them, when we can discover them, we base our immediate treatment of an attack. When arising from indigestion, how often have we cut short the spasm by an emetic or enema, when nature herself has not done the work for us, which she frequently does, and when constipation is the cause by relaxing the sphincter and evacuating the loaded intestines. But these measures often fail, and in spite of the inevitable warm bath and counter-irritation, which the child's friends have applied before our arrival, the convulsion goes on unabated; and if we do not arrest it, the child may die in the fit or from the supervening coma. Almost all the antispasmodics have been used for this purpose, and some of them with good effect at times, but no agent is so powerful or requires more skill in administering than chloroform. Some bear it very badly, and we discover the flagging of the pulse or the stertor of the breathing very soon after its application, and we must desist before any good can be done by it. In other cases its use may be kept up for a long time with no bad effects, and the convulsive action controlled. In severe cases I have seen the chloroform used freely for several hours, and the child recovered perfectly, when without it the paroxysm would have undoubtedly exhausted the nervous system, or produced cerebro-meningitis, or effusion and resulting paralysis. Such are often the results of convulsions, besides deformities from rupture of muscles, squinting, nervous excitability, epilepsy, etc., though by no means occurring in a large proportion of cases. In some children convulsions are easily excited and readily controlled, and the agent which I have found most valuable for this purpose is bromide of potassium. There is still a good deal of skepticism on this point, but I think where it has been used and persisted in, there is no doubt of its efficacy in preventing and subduing nervous excitability. I have given it, when the convulsive tendency was the result of impoverished blood from previous disease, in conjunction with wine and beef essence, with the happiest effect.

Of the effect of ice to the spine I have no testimony of my own. Dr. Edmunds, in the *Medical Times* of March 12th, 1864,

after relating a case of spasm in a woman which was perfectly relieved by this means, says: "I had seen Dr. Chapman's brochure on the subject of his discovery, and also his paper in the *Medical Times and Gazette*, but thought the idea too pretty to be anything more than a plausible theory, until my own child, being in great danger from an obstinate laryngismus, connected with dentition, I tried the ice bag to the cervico-dorsal portion of the spine, at the suggestion of Dr. Ramskill, and it has certainly done more to keep off the strangling attacks than anything else.

Lancing the gums when the convulsions occur during dentition, sometimes produces immediate relief, and, if they occur during that period, it should be our first duty.

Convulsions which take place at the outset of fevers, from the first impression of the poison upon the system, are not as serious as those which come on towards the close, and seldom require special treatment. It is a disputed point whether the prognosis from such is favorable or not. Worms, sunstroke, extremes of temperature, blows upon the head, sudden fright, severe burns, and local irritation of various kinds, are among the exciting causes of convulsions, and indicate the course of treatment. Calomel has been given very largely in convulsions, as a purgative, anthelmintic and absorbent. We must bear in mind its destructive tendency, and have a distinct purpose in view, the accomplishment of which is paramount to the risk of using such a depleting agent. If we give it to promote absorption of effused serum in the brain we may obviate its injurious effects and increase its efficiency by taking especial pains to nourish and support the general system at the same time, with all the means the patient will bear.

This plan was successful in my own little girl, who was two and a-half years old when she was attacked with a violent convulsion, after a day or two of gastric irritation, from which she seemed to be recovering, when, without any warning, she was seized with it, and, in spite of chloroform and everything else we could do for her, it lasted five and a-half hours. The right side was most effected, and, after the convulsion, remained paralyzed for several days, but recovered under the use of small doses of calomel combined with bromide of potassium, and wine, milk, and beef essence. There was a convulsive state for some weeks afterward, which seemed to be controlled by the bromide, and partial convulsions occurred without loss of consciousness, for some days after her recovery from the comatose condition which immediately followed the convulsion. The paralysis left

the foot first, and she could walk well for some days before she could hold anything in her hand, but that gradually regained its use, and lastly, her tongue, which had remained silent for four weeks, began to liberate itself, in monosyllables at first, and she slowly recovered her vocabulary, as if she had never talked before. This case, which I had hoped to give more in detail, was one of intense interest and anxiety to me, and the care and responsibility of the treatment was most kindly and faithfully shared by our worthy president (Dr. Williams). She is held up in our neighborhood as a trial of medical skill, and an encouragement to parents, as well as doctors, to hope for the recovery of their little ones under the most discouraging circumstances.

BRUNETTI'S METHOD OF PREPARING AND PRESERVING ANATOMICAL SPECIMENS.

The Paris correspondent of the Vienna "*Med. Presse*" (Sept. 1, 1867) speaks in the highest terms of praise of Prof. Brunetti's important invention of a mode of preparing anatomical specimens of great durability, which will exert a large influence upon the respective branches of medical study and education. The principal characteristic of Brunetti's preparations, says the correspondent, is certainly their astounding lightness; their color is usually light-grey or white; [the first trials of the method produced darker, more brownish specimens]. All the membranous formations and walls have acquired such a degree of dryness and rigidity that all preparations are preserved in their primitive form and in their individual topographical relations—one of those circumstances which prove and secure their scientific value. All bloodvessels, very distinctly visible in sections, are wide open; all, even the smallest and finest distributions of vessels, as well as the pulmonary vesicles, are clearly and prettily defined. The uriniferous tubes of the kidney and the glandular orifices in all parts of the intestinal canal, etc., etc., can be observed with facility, and thus an accurate image can be obtained, with a magnifying power of only 40-60, of the minute composition and intimate structure of organs. If a higher power is to be used, however, the objects should be rendered transparent by imbibition of water or glycerine, and as strongly illuminated by transmitted light as possible. . . . .

What more especially facilitates the microscopical examination of the oldest, very dry preparations, is the fact that they are

most excellently adapted to the cutting of very fine sections, and pretty large sections can thus be made without too great difficulty. No other sort of recent or preserved anatomical specimens affords this advantage in so great a degree; so that it is probable that by the aid of Brunetti's preparations the study of the architectonic composition and arrangement of the individual anatomical elements of each organ can be essentially advanced and brought to greater perfection.

Even in the study of topographical anatomy these preparations may be of much use, as all parts are mummified *living*, as it were, and most of the characteristics pertaining to them during life are preserved. Sections can be made in any direction, at all points, and the cut surfaces remain unaltered for an indefinite time. Moreover, all preparations from whatever region or organ are completely devoid of odor. . . . Excepting a very few fine and delicate specimens, they need not be handled with very great care, and most of them are sufficiently protected from breakage or other injurious influences, as pressure, blows, falls, etc., by their elasticity.

A Paris letter of the *N. Y. Times* (*N. Y. Medical Journal*, Oct. 1867) says, in reference to this invention: Here are specimens of healthy and diseased liver, of healthy and diseased lung, of healthy and diseased kidney—in fact, of healthy and diseased tissue from all parts of the body. In the lung we see specimens of interstitial granulations, of tubercles, and of cavaties after abscesses. All this is so plain that a child might learn how the lung looks in the various diseased states to which it is subject. So, too, there are slices of liver and kidney showing fatty degeneration and cirrhosis of the first, and Bright's disease of the latter.

The process of Dr. Brunetti comprises several operations—*viz.*: 1, the washing of the piece to be preserved; 2, the *degraissage*, or eating away of the fatty matter; 3, the tanning; and 4, the desiccation.

1. To wash the piece M. Brunetti passes a current of pure water through the bloodvessels, and the various excretory canals, and then he washes the water out by a current of alcohol.

2. For destroying the fat he follows the alcohol with ether, which he pushes, of course, through the same bloodvessels and excretory ducts. This part of the operation lasts some hours. The ether penetrates the interstices of the flesh, and dissolves all the fat. The piece, at this point of the process, may be preserved any length of time desired, plunged in ether, before proceeding to the final operations.

3. For the tanning process M. Brunetti dissolves tannin in boiling distilled water, and then, after washing the ether out of the vessels with distilled water, he throws this solution in.

4. For the drying process, Dr. Brunetti places the pieces in a vase with a double bottom filled with boiling water, and he fills the places of the preceding liquids with warm, dry air. By the aid of a reservoir, in which air is compressed to about two atmospheres, and which communicates by a stop-cock and a system of tubes, first to a vase containing chloride of calcium, then with another heated, then with the vessels and excretory ducts of the anatomical piece in course of preparation, he establishes a gaseous current which expels in a very little time all the fluids. The operation is now finished.

The piece remains supple, light, preserves its size, its normal relations, its solid histological elements, for there are no longer any fluids in it. It may be handled without fear, and will last indefinitely. A similar, more easily executed, but probably much less advantageous process has been invented by M. Von Vetter, and is published in the *Chemical News* (in *Dental Cosmos*, Nov. 27): Add to 7 parts of glycerine at 22 deg. 1 part of raw brown sugar and half a part of nitre, till a slight deposit is formed at the bottom of the vessel. The portion required to be preserved is then plunged, dried or not dried, and left in the mixture for a time proportional to its dimensions; a hand, for example, should remain eight days in the liquid; when it is taken out it is as stiff as a piece of wood, but if it be suspended in a dry and warm place the muscles and articulation recover their suppleness.—*St. Louis Med. & Surg. Journal.*

THE VASOMOTOR NERVES OF THE PIA MATER AND BRAIN.

By Dr. H. NOTHNAGEL,
Assist.-Physician to the Medical Policlinic at Könisberg, Prussia.

[Virchow's Archiv. XL., 203. 1867.]

New experimental investigations (on rabbits) have led the author to these results:

(1.) The vasomotor nerve-fibres for the vessels of the pia mater partly belong to the ganglionic chain of the cervical part of the sympathetic.

(2.) Another, perhaps more considerable part, of them enter the superior cervical ganglion.

(3.) Some take a course above this ganglion even, very probably in cerebral nerves.

The same results can safely be predicated of the vessels of the cerebral substance itself, though direct observation is here impossible.

These vivisectional experiments have further shown, that violent irritations (electrical or mechanical) of sensory nerves cause contraction in the arteries of the pia mater. A rabbit having been trephined and the dura mater removed, if the metallic electrodes of a strong inductive apparatus be placed upon the thigh at points corresponding to the course of the crural nerve, a distinct contraction of the arteries of the pia mater will be observed, which will continue for a few minutes after the removal of the electrodes, and gradually pass into dilatation. Undoubtedly this contraction of the arteries is of reflex nature. The excitation is transferred, in the medulla oblongata, to the vasamotor nerves of the head. Partial interruption of the courses of the latter, as far as that is possible, diminishes the effect of the irritation to a minimum. Severe mechanical irritation of the leg had the same effect.

This reflex contraction of the cerebral vessels is of importance in the analysis of the mechanism of the epileptic attack. Lately the opinion has gained ground, that a spasm of the cerebral arteries is the first link in the chain of phenomena constituting an epileptic or eclamptic paroxysm; this spasm causes anæmia of the brain, upon which depend the convulsions and coma (Kussmaul and Tenner, Brown-Séquard, Reynolds). Now it is certain, that there are cases of epilepsy that can safely be designated as "reflex epilepsy"—cases in which the disease arose from an injury or the like. The reflex origin of the convulsions is still more extended as concerns "acute epilepsy": eclampsia; (eclamptic attack of children in teething, from presence of worms, etc.) The author's experiments may perhaps throw some light upon this form of the disease. For if the above idea of the causation of epileptic attacks be correct, we must assume that in reflex epilepsy a contraction of the cerebral vessels takes place upon a peripheric sensory irritation. The experiments have actually demonstrated the occurrence of this reflex contraction of the arteries of the brain.—*St. Louis Med. & Surg. Jour.*

Blood-Corpuscles in Chlorosis.—M. Duncan, of St. Petersburg, has just pointed out the remarkable fact that the blood-discs of chlorotic persons yield up their coloring matter more easily than do those of healthy subjects.

Editorial.

Annual Meeting of the Illinois State Medical Society.—The next regular Annual Meeting of the Illinois State Medical Society will be held in the City of Quincy, on the *Third Tuesday* in May, 1868.

Summer Course in Chicago Medical College—The regular Summer Course of Instruction in Chicago Medical College, will commence on Monday, March 9th, and continue until the first of July. The course will be so arranged as to consist of one clinic and two lectures each day; the lectures to consist, in part, of thorough examinations of each member of the class. Those participating in this course, will be as follows:

Clinical Medicine—Prof. N. S. Davis,
Clinical Surgery—Prof. E. Andrews,
Obstetrics and Diseases of Women—Dr. E. O. F. Roler,
Physiology and Histology—Prof. D. J. Nelson,
Anatomy, Descriptive—Prof. J. S. Jewell,
Operations in Surgery—Prof. R. N. Isham,
Materia Medica—Prof. M. O. Heydock,
Physical Diagnosis—Dr. S. A. McWilliams,
Ophthalmoscope and Ophthalmology—Prof. E. Andrews.
Organic Chemistry applied to the Study of Special Pathology—Prof. N. S. Davis.

The above course of instruction is free to all the regular matriculants of the College.

Valedictory Lecture.—We have received a manuscript copy of Dr. J. S. Hildreth's closing lecture to his clinical course of instruction on Diseases of the Eye and Ear, in the County Hospital. It was a lecture replete with earnest thought, and judicious counsel to his class; but it was received too late for insertion in the present number of the Examiner.

Explanation.—We have received a number of valuable books, the notices of which were crowded out by the length of

the article relating to Dr. Bozeman's speculum. Among these works, is a large and important work by Stellway, on Diseases of the Eye, from the publishing house of Wm. Wood & Co., of New York. For sale by W. B. Keen & Co., Chicago.

Physician's Daily Pocket Record.—We have received from the author, Dr. S. W. Butler, of Philadelphia, an excellent copy of this work. It possesses all the conveniences afforded by any of the other "Pocket Memoranda" or "Physicians' Visiting Lists," and some that are not found in the others. We commend it to the patronage of the profession.

Dr. Bozeman's Speculum.—Among the selected articles in this number of the Examiner, is one from the *New York Medical Record*, giving an account of a new and improved vaginal speculum. It has been used by its author in several operations for vesico-vaginal fistula, and with the most satisfactory results.

MEDICAL ADVERTISING.

To the Editor of the Medical Examiner—Sir:—Wishing to correct any misunderstanding which may occur from the article in your February No., entitled "Give an Inch and an Ell is Taken," we respectfully request the publication of the following:

Having decided to devote ourselves exclusively to the treatment of diseases of the genito-urinary organs, we called on several members of the profession and faculties of the medical schools of this city, explaining to them our business, and, also, our intention of bringing it before the public through the medium of the *papers*, by the insertion of a card, as well as by the ordinary business card, and with this express understanding obtained all the names we used as references, some of whom have since requested us to suspend the further publication of their names in the newspapers; but none have forbidden their use on our business card. The appearance of our card in the "Medical Column," as referred to, was contrary to our intention or desire, but, at the time, beyond our control.

Respectfully, DRS. BROWN & HIGGINS.

Feb. 15, 1868. *119 Clark St., Chicago.*

Mortality Report for the Month of January:—

CAUSES OF DEATH.

Accident, concussion of brain	1	Eclampsia	1	Meningitis	3
Accident, poison	1	Encephalites	2	" cereb.-spinal	4
Accident, burns	2	Enteritis	2	" tuberculous	1
Accident, fall	1	Enteritis, chronic	1	Myelitis	2
Accident, suffocation	1	Encephalus, general	1	Nutrition, impaired	1
Anæmia	1	Fever, intermittent	1	Nephritis	1
Angina	1	Fever, puerperal	2	Old Age	4
Apoplexy	3	Fever, remittent	1	Œsophagus, stricture	1
Bowels, inflammation	5	Fever, scarlet	7	Occipital bone, depression of	1
Brain, congestion of	5	Fever, typhoid	14	Paralysis	2
Brain, dropsy of	1	Gastritis	3	Pericarditis	1
Brain, disease of	1	Gangrene	1	Peritonitis	3
Brain, inflammation	2	Gangrene, leg	1	Phthisis pulmonalis	38
Bright's disease	2	Gout, rheumatic	1	Poisoned	1
Bronchitis	9	Glands of neck, inflammation of	1	Pleurisy	2
Bronchitis, capillary	2	Heart, disease of	13	Pneumonia	49
Cancer	2	Hemiplegia	1	Small-pox	39
Cancer of breast	1	Hepatitis	1	Spine, disease of	1
Cancer of uterus,	2	Hernia	1	Stomach, disease of	1
Canker sore mouth	1	Hydrocephalus	9	Suicide	3
Convulsions	51	Indigestion	1	Syncope	1
Croup	8	Inanition	2	Syphilis	2
Cyanosis	1	Intemperance	4	Tabes mesenterica	7
Cyanche trachealis	1	Intestines, perforation	1	Teething	6
Cyanche maligna	1	Jaundice	2	Throat, malformation	1
Cerebellum, disease of	1	Kidneys, inflammation	2	Uræmia	1
Debility	4	Laryngitis	5	Uterus, hemorrhage of	1
Diarrhœa	3	Liver, fatty enlargem't	1	Varioloid	1
Diphtheria	21	Liver, congestion of	1	Whooping-cough	3
Dropsy	1	Lungs, congestion of	9	Unknown	3
Dropsy, abdomen	1	Lungs, hemorrhage of	1	Still and Premature births	39
Dysentery	2	Measles	21		

Total 438

Deaths in January, 1868, 438 | Deaths in January, 1867, 299 | Increase, ... 139
Deaths in December, 1867, ... 409 | Increase, ... 29

AGES.

Under 5	252	40 to 50	28	90 to 100	1
5 to 10	20	50 to 60	7	100 to 110	0
10 to 20	14	60 to 70	17	Unknown	0
20 to 30	38	70 to 80	11		
30 to 40	47	80 to 90	3	Total	438

Males, ... 224 | Females, ... 214 | Total, ... 438

NATIVITY.

Chicago	191	Germany	48	Russia	1
Other parts U. S.	101	Holland	2	Scotland	4
Australia	1	Ireland	46	Sandwich Islands	1
Belgium	0	Italy	0	Sweden	2
Bohemia	5	Norway	14	Switzerland	1
Canada	7	Nova Scotia	0	Wales	0
Denmark	0	Prussia	4	Unknown	2
England	7	Poland	0		
France	3			Total	438

MORTALITY BY WARDS FOR THE MONTH.

Ward.	Mortality.	Pop. in 1866.	One death in		Ward.	Mortality.	Pop. in 1866.	One death in	
1---	8	9,668	1,208	1-2	14---	27	12,108	443	12-27
2---	16	12,985	811	9-16	15---	39	15,766	404	1-4
3---	24	15,738	655	9-12	16---	26	14,912	573	7-13
4---	32	10,884	380	1-8	County hosp.,	7			
5---	18	9,610	536	1-9	Armory,	1			
6---	27	10,680	391	7-9	Bridewell,	1			
7---	35	18,755	538	5-35	Home of the Friendl's,	0			
8---	23	10,429	453	10-23					
9---	33	13,940	422	14-33	Marine hos.,	2			
10---	18	11,416	634	2-9	Mercy hos.,	2			
11---	36	12,924	359		St.Luke's hos.	3			
12---	32	12,695	396	2-3	St.Jose. asyl.	16			
13---	13	8,188	629	11-13	Lake Hosp.,	5			
					Total,	401			

DEATHS BY SMALL-POX.

	Jan., 1868.	Week ending Feb. 1, 1868.
3d Ward	1	0
4th Ward	5	0
5th Ward	6	5
6th Ward	3	1
7th Ward	6	3
8th Ward	5	0
9th Ward	1	1
10th Ward	0	1
11th Ward	3	2
12th Ward	3	0
14th Ward	1	0
15th Ward	1	1
16th Ward	1	0
Lake Hospital,	3	1
Total	39	15

TO PHYSICIANS.—His attempts to extend a more advanced knowledge of his specialty to physicians already in practice having been so favorably commented upon by those of the profession who have attended the previous courses, and by the medical press. **PROF. HORATIO R. STORER,** Will deliver his third private course of twelve Lectures upon the

TREATMENT OF THE SURGICAL DISEASES OF WOMEN,

During the first fortnight of June, at his rooms in Boston.

Fee $50; and Diploma required to be shown. Certificates of attendance upon the courses already completed have been issued to the following gentlemen: Drs. J. B. Walker, Union, Me.; Alexander J. Stone, Augusta, Me.; Daniel Mann, Pelham, N.H.; Augustus Harris, Colebrook, N.H; J. W. Parsons, Portsmouth, N.H.; E. F. Upham, West Randolph, Vt.; G. E. Bullard, Blackstone, Mass.; J. A. McDonough, Boston, Mass.; J. G. Pinkham, Cambridge, Mass.; James Coolidge, Athol, Mass.; Thomas G. Potter, Providence, R.I.; C. M. Carleton, Norwich, Conn.; I. Farrar, Hartford, Conn.; M. C. Talbott, Warren, Pa.; H. Gerould, Erie, Pa.; W. W. Bancroft, Granville, Ohio; A. I. Beach, Bellville, Ohio; Henry E. Paine, Dixon, Ill.; W. L. Wells, Howall, Mich.; and W. A. I. Case, Hamilton, C.W.

Hotel Pelham, Boston, January, 1868. feb3t.

Money Receipts to Feb. 24th.—Drs. V. L. Hurlbut, $3; W. Fleming, 3; J. S. Sherman, 3; Theodore Hoffman, 3; J. Haller, 3; M. Shephard, 3; W. H. Baxter, 5; H. W. Pickett, 3; J. Good, 3; E. Young, 6; L. Corey, 3; M. Parker, 3; G. W. P. Hadder, 3; W. A. Barstow, 3; H. A. Stokes, 3; John Ten Brook, 5; W. M. Landon, 6; H. C. Lester, 3.

Number of Emigrants who have Arrived in New York during past Year.—Two hundred and thirty-three thousand four hundred and eighteen.

The Cholera has again made its appearance in India, as was expected, indeed, as the result of the pilgrimage of the past year. Apropos of the cholera: a French writer claims as a prominent cause of the pestilence the disappearance of a variety of crocodile, called the gavial. This animal formerly destroyed the bodies thrown into the Ganges, in accordance with the religious customs of India. But since the soldiers have been in the habit of waging war upon it, the gavial has been nearly exterminated. In the absence of its scavenger work, the bodies decay and produce the cholera; at least so claims this writer, who asks for a government protection of this important reptile.

AMERICAN MEDICAL ASSOCIATION—PRIZE ESSAYS FOR 1868.

The American Medical Association offers two prizes of *One Hundred Dollars* each, for the best two original essays upon subjects of professional interest; the Committee reserving the right to reject all, unless deemed fully worthy.

Competitors for these prizes must forward their essays to Dr. Charles Woodward, Cincinnati, Ohio, free of expense, on or before the 1st of April, 1868.

Each essay must be accompanied by a sealed note containing the author's name and address, and on this sealed packet must be inscribed some sentiment, motto, or device, corresponding to a like sentiment, motto, or device on the essay.

Charles Woodward, Chairman,
W. W. Dawson,
E. B. Stevens,
Roberts Bartholow,
P. S. Connor,
} Committee.

Medical journals throughout the country are requested to copy.

THE

CHICAGO MEDICAL EXAMINER.

N. S. DAVIS, M.D., Editor.

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Original Contributions.

ARTICLE XI.

REPORT ON PRACTICAL MEDICINE.

By S. P. BREED, M.D.

Read to the Military Tract Medical Society.

Gentlemen of the Military Tract Med. Society:—In behalf of the Committee on Practical Medicine, allow me to remark that my report consists of two papers, one, a brief, hurried, and, therefore, very imperfect retrospect of the past year, and some observations relative to the diseases peculiar to this climate, as they appear to one who has recently come here. The other paper consists of an essay read before the State Medical Society, at Decatur, in 1866, with the request that it should not be published; together with a polypus of the uterus, and its history.

REPORT PROPER.

The current year has been noted in Northern Illinois for extraordinary good health. No marked epidemic of any kind as far as my knowledge has extended, has entered to dissurb the universal tranquility throughout the agricultural districts of this part of the State.

Early in the season, much apprehension was felt, everywhere, amongst all classes, lest the cholera, which seemed to be steadily approaching us, should invade the quietude of our peaceful and happy homes in this section. With the view of mitigating

the evil as much as possible, the Town Council bestirred themselves; the sanitary rules and regulations were reviewed; health officers employed; nuisances abated, as much as possible, so as to be in readiness for the fearful scourge. Nevertheless, the hot season came and went; men hurried, women worried, but the dread epidemic kept at a respectful distance. Other diseases seemed to retire at its approach, as though they would give it an open field and undisputed possession of the ground; and *all*, by a sort of common consent, seemed to look with fearful dread and apprehension, expectant of the unwelcome visitant. But, fortunately, it came not.

There have been, by far, fewer diseases common to the sultry days of summer and the "sere and yellow leaf" of autumn, than for many years past. Cholera-infantum, which usually carries off its victims in such frightful numbers in our cities, towns, and even in the country districts, has been almost unknown amongst us the past season.

If I were asked to state the nature of the diseases prevalent here during the past summer, I would say that they were almost entirely of a nervo-rheumatic, neuralgic, or a hysterical character, or non-inflammatory. Indeed, inflammatory affections have been of exceedingly rare occurrence. The few fevers that have presented themselves to my observation, have generally been of a mild intermittent type, or, at least, have not been disposed to be continued. It is true, however, that, recently, several more severe and obstinate cases of a *low* and *continued type* have fallen under my observation, and they have seemed to me to approach that form of fever called cerebro-spinal meningitis, or spotted fever; but, they have, I am happy to say, been very few.

The season has been one of excessive *drouth*, especially during the latter part of the summer and fall. No rains have fallen, of any consequence, since the harvest. The temperature has been uniformly mild and pleasant, and the frosts of autumn have delayed their coming much later than usual. Fruits of all kinds were very abundant, of which our people partook without stint or moderation. Crops of all kinds came

in good; and every department of useful industry and art flourished, and all classes (except the doctors) reveled in a universal cornucopia.

Coming, as I did, from a latitude some 3° south of this, it may not be uninteresting to medical men here to state what my impressions are, in regard to the variation in the character of the diseases as they prevail in the two sections. One of the first things observed by me, after my arrival in this climate, was a remarkable tendency, among the people generally, to a diarrhœa. Purgative medicines acted much more easily and freely than I had been in the habit of seeing them do. Doses no larger than I had been in the habit of using constantly, I found, often, to act with extreme energy, producing drastic catharsis; while diarrhœas proved peculiarly obstinate, and sometimes quite intractable, the acute stage inevitably passing gradually into the chronic. So noticeable was this feature of difference in the character of the same diseases in the two localities, that those symptoms which I should have considered trivial in my former place of residence, often proved tedious, troublesome, and sometimes bid defiance to all methods of treatment, carrying the patient along for weeks, and months even, in a state of painful anxiety and impaired activity. This peculiarity, I doubt not, affords an explanation for the fact that some of our physicians have, they say, pretty much ignored the use of cathartics in their practice. Now while I see and acknowledge this tendency to diarrhœa, and allow that this fact should be remembered in all of our prescriptions, I, nevertheless, with all due deference to their opinions, still think they go to an opposite extreme, in rejecting purgatives from their list of remedies. "*In medio tutissimus ibis*," is a maxim as true in the practice of medicine as in the nicest deductions of transcendental philosophy.

In all of those cases where this tendency to diarrhœa obtains *decidedly*, these physicians may succeed very well; but I have good reason to know that it now and then happens that they meet with cases of habitual constipation, in which their set of remedies not only do no good, but, in all probability, do much harm.

For instance, I have known a few cases (treated ineffectually by the advocates of the non-cathartic plan) of pregnant women passing on through the latter part of their period of utero-gestation, with such a distressing state of obstinate constipation that, when the critical period of accouchement came, their whole systems were borne down by the depressing effects of the absorption into the circulation of much of those deleterious and noxious matters which instead of passing off through the natural channel, the alimentary canal, were diverted *therefrom*, and, by the law of compensation, were attempted to be removed through the absorbents and exhalants. Before I proceed further on this point, I wish to remark that, very soon after I came here, I observed, also, that there were very many more cases of spinal disease than I had been accustomed to witness. I was at a loss to account for this phenomenon. Whether it arose from the difference in the occupation and character of the people, or was due solely to local or climatic causes, I could not tell; but of the fact, I have no doubt. By calling the attention of medical men to the matter, I hope to obtain such assistance as will lead to a plausible explanation. Some of these cases, I thought, merited the name of spinal irritation, while others were attended with symptoms so different and unique, that I was sometimes at a loss to determine what was the appropriate appellation for them. Then, we had spinal meningitis, both acute and chronic. Dr. Wood thinks chronic meningitis a very rare disease. I am inclined to believe that, in this climate, it is not so very rare. Then, we have those symptoms which induce the belief that the case is one of myelitis and its results. Sometimes, the inflammations were undoubtedly of a gouty or rheumatic character. Now, amid all these different varieties of spinal complaints, we had cases of paralysis of the limbs, atrophy, and degeneration of the muscles of the extremities, so that the halt, tottering, and deformed met me at every corner.

This general tendency to spinal complaints, I think, may probably account for another circumstance which I soon observed, and that was, that strychnia, nux vomica, ignatia, and

brucia, together with valerian and such nerve stimulants and sedatives, were in use to a much larger degree than I had been accustomed to see them. They were often used, indeed, in diseases where there did not appear to be any demand for them. They, or some of these active remedies, were almost sure to enter into every cathartic pill, and, frequently, into mixtures for diarrhœa, dyspepsia, neuralgia, hysteria, dysmenorrhœa, and amenorrhœa, etc.

In passing, I mention another item of some note. In a practice of some eighteen years where I formerly resided, I never happened to meet with a case of tapeworm; but, during the two years of my stay in this locality, though my means of observation have been much more limited, I have seen nearly half a dozen cases; while intestinal worms, generally, are more frequently met with. The people in the former place live much on pork, while the inhabitants of this neighborhood pretty generally use beef. Two of the cases, I found occurred in persons who seldom, if ever, ate pork, but, as they said, were "great on rare beefsteak." What connection this circumstance may have with the origin of the tænia I do not know, but I mention it, that it may go for what it is worth. It may mitigate the prejudice against pork eating, perhaps, and tend to throw some suspicion on the healthiness of raw beef. It may not be amiss, also, to mention the circumstance related by Hasselquist, that the tapeworm is very common in Egypt, among the Jews, who, it is well-known, are religiously restrained from eating pork.

I continually meet persons *here*, afflicted with nasal catarrh and œzena. The per cent of such cases must be much greater here than where I formerly lived.

It is here that ignorant, itinerant charlatans with their electro-galvanic machines, like organ-grinders, who pretend to grind diseases of all kinds out of their patients, meet with extraordinary success, and electrical baths are immensely popular. From a somewhat careful survey of all these phenomena, I am inclined to believe that, in order to understand this seemingly complex and difficult subject, we must look to the cerebro-spinal and ganglionic system of nerves. I apprehend that the

remote cause of many of these cases of obstinate constipation, in females especially, may be found in a depressed state of the nerve centres, particularly those sympathetic ganglia supposed to preside over the alimentary secretion. To the better understanding of this subject, it is necessary to remember that each and every portion of the body is connected with the brain and spinal axis by two different sets of nerves, *viz.*, the afferent and the efferent.* The afferent set of nerves send impressions from all parts of the body, through the ganglionic and spinal centres, up to the brain or sensorium; while the efferent set send impressions out from the brain, through the same spinal and ganglionic systems, to all parts of the body. Indeed, it is confidently asserted by physiologists, that each and every part of the body must have its peculiar centre in the brain, and its peculiar nervous fibril to maintain a connection with that centre, though a number of these fibrils may be included within one general sheath. If any irritation, therefore, occur in any portion of the body, as, for example, in the alimentary canal, the afferent nerves, which are extended, in a delicate plexiform expansion, all over the intestinal mucous surfaces, immediately take cognizance of the fact and instantly convey the intelligence, in the form of a sort of telegram, up to the brain, or capitol; while the brain, thus informed, loses no time in sending down, through the efferent set of nerves, such reinforcement is as necessary, or the best at command, to relieve the difficulty. Thus, it must be borne in mind, that all parts of the body are bound *intimately* together by numerous bonds of sympathetic union, so that all parts are under the constant vigilance of sleepless sentinels, ever ready to send up to the brain any information, and warn it of any danger; while the sensorium, like a watchful governor, is constantly on the *qui vive*, with a numerous retinue of prompt and willing servants, in the shape of the efferent nerves, ready to execute the will and remove from, or ward off, any danger to life or limb. No person can fully understand the diseases to which I am now directing attention, until he has carefully studied that complicated system

* The discovery of these two sets of nerves, is due to Sir C. Bell, in 1835.

of reflex action so ably elucidated by Marshal Hall, and extended and amplified by Dr. Frazer Campbell and M. Claud Bernard. [See Note.]

It is the excito-secretory system of nerves which, I think, plays so conspicuous a part in the diseases above mentioned. When the nerve centres presiding over nutrition, digestion, and the intestinal secretions generally, from any cause (and they are subject to be sympathetically modified in their molecular action by the slightest and most varied impressions upon any portion of the body), become too much depressed, irritated, or *in any way* so modified in the delicacy of their normal structure as to unfit them for furnishing the stated necessary nervous supply, *disordered digestion is the result*—either diarrhœa or constipation. Perhaps they may succeed and alternate with each other. When *constipation* is the result, especially if obstinate and long continued, nature attempts, by a well-known law in the conservation of the animal economy, to do *indirectly* what she has failed to do *directly*. She attempts to relieve the constipation or loaded state of the bowels, by promoting the absorption of the fæcal matters and carrying them off through the skin and kidneys. In doing this at such a disadvantage, and in such an unnatural way, it is not surprising, sometimes, to see the whole system poisoned, the fluids corrupted, and the *nerve centres* still further depressed or irritated, and more especially when it is remembered that these nerve centres *first* feel the noxious effects of any toxic agent in the circulation, that they, more than any other tissue in the body, demand, for their normal action, pure, oxygenated blood, free from any deleterious agents whatever, we shall be able the better to understand why they are so frequently at fault. When the importance of these delicate structures is better understood in maintaining the *solidarity* of the whole human economy—the muscular tension throughout the body, the part they play in the processes of elaboration, secretion, growth, repair, and extension; disintegration, excretion, respiration, digestion, locomotion, and ratiocination, we may begin to conceive something of the magnitude and importance of this intricate subject.

Now, such a patient, if not relieved by some *coup de main*, some change in habits, regimen, climate, or medicine, *sinks*, inevitably, into a state of cachexia, or some form of disease justly alarming to himself and his friends. Now, I wish to call the attention of medical men here to this matter, with the view of obtaining their assistance in tracing the chain of morbid action, link by link, up to the prime cause and true pathology of many of these anomalous cases.

When it is borne in mind that, in this climate especially, the onus of disease is thrown upon the nerve centres, and that it is in these nerve centres that the nerve force is correllated into cell action, secretion; *here*, that the nerve force seems to be generated, in fact, and that the nerve centres, *altogether*, preside over all the physical phenomena in the body, it will not seem so strange that even slight molecular changes in these delicate structures should crop out in grave and formidable symptoms of disease, nor, moreover, in the different stages of the same disease that there should often be very different signs displayed to the mere superficial observer. For instance, in the first stage of a case of constipation, caused by a depressed state of the sympathetic ganglia, so that the intestinal mucous surfaces supplied by the nervous expansions from these nerve centres, feeling the want of the normal nervous *supply*, sends up, through the afferent nerves, to these nerve centres a demand for the necessary power to carry on their functions, while the mucous surfaces, from a want of the proper nervous distribution, by a well-known law in pathology, are thrown into such an abnormal state of excitement as to *intensify* this *demand*, and thereby call out, temporarily, the *reserved forces*, in such a way as to induce an extra effort to relieve the loaded bowels of their unwonted load. Perhaps they do partially succeed, but when this urgent demand is relieved, they sink back into a still greater degree of torpor and depression than before. The bowels fill up again very soon, when nature, no longer able to relieve the distension in the natural way, resorts to another and less direct method of relief, *viz.*, the absorbents at once take up all matters of sufficient tenuity to be absorbable, while

the more crude and irritating contents remain hardened and impacted in the folds of the colon till nature, arousing herself again, makes another desperate effort to get rid of the offending mass in the natural and direct way. She may even again partially succeed, and thereby squeeze through between the scybalous masses the more fluid contents of the alimentary canal, inducing the belief in the mind of the unwary physician, perhaps, that the patient has a diarrhœa, and he resorts to such medicines as effectually put a stop to even these feeble efforts of *nature*.

Now, if the real cause of the difficulty could be divined. and the nerve centres, in these cases, could be steadily aroused and permanently sustained in a more exalted action, the good results of the means employed would soon appear. But now, if nothing is done in the right direction that reaches the true cause of the difficulty, as soon as these excrementitious and noxious matters absorbed, enter the circulation they exert a deleterious and poisonous influence upon the whole system, and the nerve centres, in common with the whole organism, suffer still further injury and depression. Now, if the patient happens to be a pregnant female (which often occurs with ladies in such a condition), she goes on halting, complaining, and suffering from the effects of these sources of blood-poisoning and secretion-corrupting, until her vital powers of resistance are so diminished that, when the critical changes attending and consequent on confinement take place, she finds herself illy prepared to go safely through the trying ordeal. Now, mark what happens to her. She sinks into that dangerous form of puerperal fever denominated *putrid*, where all the symptoms of a zymotic poison, so much dreaded, occur. Every person who has practised midwifery any considerable time, must have been occasionally called to witness such cases of malignant putrid puerperal fever, where the powers of vital action were so impaired from some previous habit of body, as to be able to make no effectual stand against the terrible destroyer.

In these cases, there is often great doubt and serious misgivings in the mind of the medical attendant, in regard to the

nature of the disease and the best mode of treatment. There is often undeserved censure, also, cast upon the physician, from the real cause of the trouble not being understood. My experience induces me to believe that constipation *before confinement* is a frequent and strongly predisposing cause of this dangerous disease. Several cases have come under my observation, where I happened to know that such a state of the bowels preceded the confinement. In running my mind back over a professional life of some twenty years, I cannot now recal a single case of such severe and dangerous fever occurring, where the bowels had been properly attended to before labor. I do not pretend to say that this is the *sole* cause, for I am satisfied that it is not, but I do firmly believe that if women were more careful in this particular during the latter months of pregnancy, far less cases would occur, and those that do happen would be milder and more manageable than they are. Should I be called to a case of the kind I am speaking of, and, on enquiry, find that the bowels had been neglected before confinement so that there had been serious habitual constipation, I declare to you, gentlemen, that this fact *alone* would have much influence in the prognosis. I am the more anxious to impress this point on the minds of the profession because, as I have intimated already, I have noticed a disposition among some of my co-laborers in the practice of medicine to ignore purgatives in the treatment of all diseases. From so limited a means of observation, I acknowledge that it would not be safe for me to be too sweeping in my conclusions; nevertheless, I am quite confident, from what I have seen, that there are numerous cases of delicately organized females, and even males, of sedentary habits, among the young, and more especially among the *older*, who are groaning, unrelieved, under a complication of diseases of a somewhat anomalous character, who would be quickly restored to health and happiness by simple means, if the fact could only be clearly seen by the physician, that it is *altogether impossible* to *arouse* these *nerve centres* until the *influx* of *putrescent matters* from the *alimentary canal* are stopped and turned off in their *natural channel.* One of the first, most practical, and most impressive

lessons I learned in the study of female diseases was from Dr. Gooch, in regard to dysmenorrhœa and some forms of menorrhagia attended with pain, where he says that the best and most effectual way to arrest the discharge often is to *stop the pain* and let the discharge take care of itself. By following this advice and directing my remedies to the relief of the pain, by acting on the *uterine ganglia* and nervous system, I have sometimes cured distressing cases with great ease.

Several years ago, I was called to see a young man whose bowels could not be got to move, although he had taken a large amount of active cathartics and injections. This obstinate constipation occurred in consequence of a kick from a horse in the abdomen. After all other means seemed to fail, and while I was waiting for a consultation, it occurred to me that the difficulty might arise from a sort of paralysis from concussion of the sympathetic ganglia, and I was led to this conclusion from the fact that a blow upon the epigastrium would produce syncope; I therefore determined to try the battery. In the meantime Dr. Worthington came, who, regarding it as a case of obstruction from local inflammation, advised bleeding and a blister. But while we were parleying over the matter, the father came out and told us the boy was all right, as his bowels had been thoroughly moved. This changed the phase of the case, and he got well without bleeding or blistering. Did anybody ever before hear of concussion of the sympathetic ganglia? And why not?

NOTE.—Dr. Marshal Hall, of London, published his discovery of the excito-motory system of nerves in 1837. In 1850, Dr. Henry Fraser Campbell, of Augusta, Ga., announced the discovery of a similar relation between the cerebro-spinal, and the great sympathetic, or that extensive system presiding over the functions of nutrition, elaboration, and secretion, and he called it the excito-secretory system of nerves. In 1855, M. Claude Bernard, of Paris, made his interesting experiments upon the pneumo-gastric nerve, and showed that it influenced, very much, the secretion of the liver, and tended, therefore, to confirm, by actual experiment, the previous discovery of Dr.

Campbell. In 1857, Dr. Marshal Hall, after acknowledging the honor due to these two men, announced his belief that, in addition to his original discovery of the primary system of reflex action, called excito-motory, there may be several sub-systems, and he thinks the excito-secretory should be classed with the latter. Now, while I acknowledge that the excito-motory system may be so extended as to comprehend all the offices and function of the body, as every act, every molecular change even, implies motion; and every excitor influence, mediate, immediate, or remote, voluntary or automatic, internuncial, or imperative, must take place through the nervous system; yet, I see no advantage in thus extending it; and I think it more natural to make divisions and subdivisions according to functions and offices, and to generalize, also, accordingly. Whether we multiply the nerve centres and divide the spinal axis into separate segments, when the circle is completed through them, or take a more general view of the whole organism, classing together corresponding offices and functions, is very much a matter of taste where the *modus operandi* is the same, and where they have alike for their object the conservation of the animal fabric.

Therefore, in order to facilitate the study, and systematize the matter more thoroughly, I propose to make several primary systems and several sub-systems. I would confine the primary excito-motory system to the muscular movements of the body, and make the sub-systems include the voluntary and involuntary. The primary excito-secretory system should include all impressions and causes, transmitted through the nervous system, influencing, in any way, the various secretions of the body. The sub-systems under this head may be extended almost indefinitely. Other primary systems may be indicated, as the excito-circulatory, general and local: while we may have still others, as the excito-inflammatory, excito-suppuratory, etc. If it be objected that there are, in fact, no such actual systems in the anatomy of the human body, I will remark that if it be true, as asserted, that every portion of the body has its distinct centre in the brain or spinal axis, and a distinct filament to

maintain that connection; when we see certain impressions upon *one* part of the body produce, *uniformly*, the same effects upon some *remote organ or tissue*, we have good reason to believe that there subsists, between these two parts, a connection closer and more intimate than with other portions of the body. This connection must be maintained, somehow, through the nervous system. Common observation in the effects of remedies, and in physiology and pathology, all concur in establishing this truth, and, to the physician, a thorough knowledge of these intimate relations and remote sympathies is important and doubly interesting. In order, therefore, to bring this matter strongly and more fully before the mind, so that a bird's eye view can be had, I propose to arrange the subject in a table, as follows:

- **Excito-Ideational** — All impressions received through the sensorium on the cerebrum, exciting or modifying the thoughts.
- **Ex-Motory**
  - Voluntary — Ideo-motor and emotional influences, having the cerebrum for their centre. All the influence the will may exert in the movements of the body.
  - Involuntary — Sub-Systems—
    - Ex-Respiratory, as the atmosphere, or cold water on the body.
    - Ex-Emetory, Emetics, sights of disgusting objects.
    - Ex-Deglutory, Food masticated and insalivated.
    - Ex-Defecatory, Fæcal matter in the rectum.
    - Ex-Parturient, Full period of utero-gestation.
    - Ex-Convulsive, Worms, aura epileptica, remote irritations.
- **Ex-Secretory**
  - Ex-Salivary, Food in the mouth.
  - Ex-Gastric, Food in the stomach.
  - Ex-Biliary, Calomel, the passage of the alimentary mass.
  - Ex-Lactary, Empty uterus, Faridisation, etc.
  - Ex-Follicular — Dermo-perspiratory and sebaceous-mucous. All the gl'ds whose ducts open into the al'y can'l.
- **Ex-Circulatory**
  - General, as — Stimulants, healthy food, pure air, mental habitudes.
  - Local
    - Hyperæmia, local determinations, congestions, etc., in health or disease, from the blush on the cheek to the gravest forms of disesase.
    - Metastasis, retrocessions, remote and secondary inflammations, as pneumonia from burns, etc.
- **Ex-Suppuratory and Ex-Inflammat'y** — It is often observed that remote irritations produce inflammations. Sometimes this inflammation runs rapidly into suppuration, as in case of metastatic abscess, while in other cases, as in orchitis from mumps, this result rarely happens.

Why is this? There must be some occult cause for this, and I know no better explanation, than to say that the nervous dis-

tribution is such, that in one case there is a tendency to suppuration, and in the other, though the inflammation may be equally new, still as the suppurative tendency being wanting, resolution finally takes place. Whether this explanation is correct or not, I think this table will assist to fix the fact on the mind of the *pupil* or physician, and assist him to investigate the matter, until he obtains a better one.

ESSAY.

"VIA OFFICII VIA SALUTIS."

After my appointment as delegate to attend this Society, I thought it might be expected of me to contribute something to promote the interest of the convention; and I felt, also, a desire to cast in my modicum of influence in some way, to advance the general good. Therefore, after a little deliberation, I determined to present, for the consideration of this meeting, the above motto, which, translated, means, "The path of duty is always the path of safety." In the practical illustration of this motto, allow me, gentlemen, to present to you this morbid specimen, together with the following brief history of the case:

Mrs. G. R. B., relict of the late Dr. B., of Schuyler County, Ill., *æt.* 31, the mother of three children, and a widow for some 18 months, had been suffering for about a year from repeated and exhausting attacks of uterine hemorrhage, for which she had been subjected to various modes of treatment by the physicians of the various schools, and at different places. First, at Quincy, Ill., and, subsequently, at Rushville, Schuyler County, Ill., where she took no small amount of cayenne pepper, lobelia, etc., according to the most approved system of modern eclecticism; and, I believe, "infinitessimals" *ad infinitum*, from the disciples of Hahnemann's theory of "*similia similibus curantur*," till she was reduced to the very verge of the grave.

The disease had been pronounced, either through ignorance, or by way of justification for the inefficiency of their treatment, by these modern medical wiseacres, "cancer of the womb;" and she had, consequently, taken the thousand and one infallible cures and specifics for that hopeless affection, till at length, dis-

heartened in mind and exhausted in body, pallid and ensanguined, thoroughly discouraged, and quite disgusted with the various unavailing modes of treatment brought into requisition for her relief, she was, at length, brought home to her father's house to meet her fate, despairing of all cure; when, on the 19th of November, 1864, I was first called to see her.

On examination per vaginam, I felt what I then took to be the posterior lip of the os uteri, somewhat swollen and elongated, but soft and *insensible to the touch*, and the vagina filled with coagula. She had a rapid, thread-like, and hemorrhagic pulse, frequent and troublesome palpitations, with that peculiar feeling of vertigo so characteristic of excessive loss of blood. Not feeling quite satisfied about the diagnosis, after several days of delay, however, a consultation was advised. Dr. E. C. Parker, an intelligent physician of Beardstown, Ill., was called to meet me at her bedside. After a review of the symptoms, he gave it as his opinion, that the hemorrhage proceeded from the internal surface of the uterus; and he advised an injection of diluted creosote. In making the injection I used the speculum, for the double purpose of convenience in the operation and the more perfect examination of the os and neck of the uterus. The first sitting satisfied me that what I had taken for the posterior lip of the uterus, enlarged, was, in reality, a tumor of some kind, about as large as a *filbert*, projecting through the os. It was of a pinkish color, and seemed to be covered with a villous coating. It was insensible to pressure, and, indeed, it had never caused her any pain in that region. I pressed the canula up through the os, in front of the tumor, into the uterus, and completed the injection; but it had no effect whatever on the hemorrhage. Hence, at another sitting, a few days afterwards, I painted the tumor all over with concentrated creosote, causing no pain worth mentioning, which arrested the flooding for the space of two weeks. At the expiration of this time, it returned as before. On examination, I then found that the tumor had increased nearly one-half in size during that short time. I now felt fully satisfied that the hemorrhage proceeded from the tumor, in fact, oozed out from all parts of its surface. From this time, my

mind was made up that it was a polypus, and I strongly suspected, *believed*, indeed, that the suppression of the discharge had contributed very much to the growth of the tumor.

Now, gentlemen, I cannot do justice to myself in this statement, without entering a little more *in extenso* into the circumstances connected with this case, by way of explanation. The family with whom this lady stood connected lived near me, and had been, for *more than ten years*, my most persistent and malignant professional enemies; and they had never, during all that time, lost any opportunity of traducing my professional character, or prejudicing all they could possibly influence (and they exerted no small influence, I assure you) against me, and especially our system of practice. The *rationale* may be found in the fact, that the husband of this lady had been, when alive, an eclectic physician, practising in the same part of the county. After his death, my relations with the family became more amicable, though my bearing towards them remained quite the same (always courteous and affable), so that they had several times requested me to visit members of the family in cases of sickness. Add to this the additional fact that I had sold out my property and practice in that neighborhood, and intended soon to leave the county. I felt, therefore, no further desire of extending my reputation as a physician in that vicinity. I supposed, also, that she would be very likely to plead the protection of the profession; and last, though not least, I knew that to perform the operation of removal by ligature, which I considered the most expedient under the circumstances, I should be under the necessity of sending off some distance to procure the instruments I deemed necessary, *viz.*, a speculum, matrices, and Gooch's double canula, as they were not owned by any physician within my reach. Notwithstanding all these motives prompting me to *cut my patient* (and I knew that these circumstances would make my excuse plausible) and leave her to her fate, or to the very great inconvenience of seeking medical aid elsewhere, which, I fully understood, would be exceedingly difficult, *I felt prompted by every principle of honor and fidelity, in her great need and extremity, to remember nothing of the past,*

but to make whatever sacrifice of *feeling, time*, and *money* was necessary, and go forward and render her the necessary assistance, with the hope of saving the life of a mother and a daughter, and thereby make a *generous* and *magnanimous* return for all the sharp and unkind cuts of the past.

After a little deliberation, I determined to make "a clean breast" of the matter, and I, therefore, told her and her friends, in full household, the precise nature of the disease, what I proposed to do, and what would be the *probable result.* Let it be remembered, that I had not before given a definite opinion in the case, and they had been led to believe the disease incurable or malignant; hence, they were all very agreeably surprised to learn that the case was capable of being cured, and their *faces brightened up* and became *radiant with hope and joy*, as I represented to them the probability of her *restoration* to *health*, to *happiness*, and to *them.* I stated, also, to them, that if they doubted my opinion, or the feasibility or propriety of the operation, they might call additional advice from any source they chose. After a little deliberation and a short conference, they seemed cheerfully to resign the case into my hands, and even encouraged me to go forward and do what I thought was necessary and right in the matter, and they would be satisfied with the result. I, therefore, sent immediately to Chicago and procured the aforesaid instruments, and, on the 10th of March, 1865, I ligated the tumor at the neck, which came off on the fifth day, without an untoward symptom; since which time she has fully regained her health, and continues to enjoy the same up to this time.

Thus, I have my *revenge* in the *double pleasure* it now *affords me*, of being able to present to you, gentlemen, *this beautiful specimen of uterine polypus*, and moreover, of giving to you an instance of the practical exemplification of the truth of the motto I have selected as the subject of these remarks, which, perhaps, we are too prone to forget, *viz.*, that the path of duty and the path of honor are, always, paths of safety and success.

Perhaps I should not omit to state, in connection with the history of this case, that this lady always enjoyed good health

up to the time of the death of her husband. During her maiden and married life no irregularity amounting to disease had ever occurred in her uterine functions; but immediately on the appearance of the hemorrhage the menses became suppressed, and very soon thereafter, her appetite became depraved and capricious, with a constant longing after, and an irresistible desire for, slate pencils, soapstones, etc.; but, on the removal of the tumor, the menses very soon returned, and the anæmiated and chlorotic countenance gave place to the ruddy hue of health and vigor, and all that vitiated, voracious appetite vanished as by magic.

If this brief and imperfect sketch shall, in any degree, serve to encourage the members of our noble profession who might otherwise be tempted to forget their dignity, in seeking redress by retaliation for personal wrongs and professional injustice, to *bide their time*, turning neither to the *right* nor the *left*, but to pursue, *straight forward* in the path of duty and the path of honor, the *even tenor of their way*, with the *full assurance that true honor*, under all circumstances in life, *will*, sooner or *later*, *inevitably bring its legitimate and ample reward*, I shall have written these lines at the right time, and read them in the right place. I close, as I began, with the motto, "*Via officii via salutis.*"

ARTICLE XII.

THE VALEDICTORY LECTURE TO THE CLINICAL COURSE ON OPHTHALMOLOGY AND AURAL SURGERY IN COOK COUNTY HOSPITAL.

By J. S. HILDRETH, M.D., Surgeon to Hospital.

GENTLEMEN:—Our thirty-first lecture, and last of the present course, is concluded. Many of you will soon leave for fields of practical effort. To get into practice, is the aim with you all. To those about to make the essay, it has become an all-absorbing and anxious thought. Some remarks, bearing upon this subject, seem pertinent to the waning hour.

Practice is the exercise of the comprchension of a subject. Compreheneion may be defined, as taking hold of in the mind; the power of the understanding. Results will correspond to this faculty, other things being equal. When large, its manifestations are powerful; as in the orator, whose polemic eloquence sways the multitude. If refined, the effect will be subtile and delicate; as with the prima donna, whose chant plays upon the heart of her audience. Let the comprehension be selfish and wicked, actions become ugly and brutal; pirates and scoundrels generally, illustrate this. Now, the understanding, or comprehensive grasp of anything, may be diversely acquired:

1st. By trial; as a mason tempers mortar—a manipulation of chemistry, though he may not know the meaning of the word; or, as a laborer learns the use of the lever, in raising heavy bodies—yet ignorant of its mechanical principle.

2d. Philosophically, or by induction and deduction, as Newton grasped the law sustaining the universe; Columbus discovered America.

3d. Accidentally, without forethought, as gold was found in California; Gasthold Schwartz is said to have stumbled upon gunpowder.

4th. From the minds of others, as shown in the moulding influence of association—a man is known by the company he keeps; in the use of books—they are sacks of food for the understanding.

There are still other methods. But, acquire it as one may, comprehension, or knowledge, is the measure of capacity for usefulness and everything else. Manifold causes and conditions make it exceedingly varied in different persons. Let us examine a few:

Take capability. How many have fiddled catgut for a reputation, with no other result than to fiddle away their time; yet, Ole Bull is celebrated throughout Christendom, for his matchless execution on the violin. One artist will produce a portrait that speaks to you; while another, with the same kind of paints, brushes, and canvas, makes a picture nobody recognizes, unless the name be written beneath. Sometimes this quality is intuitive, as with a celebrated mathematician of this city.

Next, see the effect of education. Take two men of equal capacity and bent for a particular calling. Educate one systematically, and let the other come to it, as best he may. Then note the difference, as shown in the career of certain officers in our late war. Innumerable other striking illustrations of this might be citcd, but one amply proves the point. Extraordinary ability, alone, can compensate for a lack of systematic training; and, even then, the individual must needs train himself.

Quality of mind, good or bad, a love of truth, or the reverse, wields a potent influence over the intelligence. Minds are frequently found, so small in goodness, it seems as if they constantly dreaded that some truth should penetrate their littleness. Some are ugly enough to refuse to investigate what they fear to be true; thinking, thereby, to extinguish scientific light. Others are so mean as not to admit what they know to be true, lest it benefit somebody beside themselves. And there are still others, too stingy to either learn or let anybody else, if they can help it, spending their time trying to make believe the world has come to a stand-still; that there is no advance in anything, because they, themselves, are incapable of any. Verily, they have their reward.

Let us never forget, however, to do justice to a large and excellent class, who aim to do right, but are enslaved by others, or thwarted by circumstances beyond their control. Such deserve, and must have, a better fate.

Comprehension also varies in kind. There are those who have peculiar knowledge of designing, modeling, or projecting; and, then, there are those specially fitted to grasp the execution of a design, model, or plan. Constantine the Great could found St. Peter's, at Rome; but it took other minds to work it up. An architect models a ship he cannot build; carpenters, blacksmiths, ropemakers, and numerous other workers, must construct the craft. An engineer projects a railway across a chain of mountains; the manufacturer of gunpowder, smelter of iron, rude bosses, driving ruder gangs, with manifold agencies besides, must carry out the plan, or the parallel bars of iron can never unite States, mingle society, and so hold a nation together.

In manufactures and the arts, we frequently see a certain form of comprehension, called aptitude; shown in turning out glassware, compounding silk and woolen dyes, making porcelain, etc.

Another, and very important form of this faculty, is a characteristic trait of men who lead the world: a quality of mind which seeks out, brings together, arranges, and sets to work the requisite materials and forces for a certain result. All successful persons, in anything, possess more or less of this influence. How it preponderates in the life of Washington, Martin Luther, John Jacob Astor, or Stephenson. Great and important enterprises often search long and hard to find a master, with enough of this quality to bring them out. There were competent hands ready to make submarine cable, men to cast it into the Ocean's depths, nautical skill to guide them with their charge, astute electricians to locate break and find defect, vigilant operators, shrewd capitalists, and all other means for the success of the Atlantic cable. This scattered material and personnel had, however, to wait until Cyrus W. Field came to marshal them together, and tie the knot between the old and new continents. During the late rebellion, what gigantic armies were in the field; what fleets upon the seas. Monitors crowded the rivers; innumerable munitions, which made the world wonder, were brought to bear on every side. The nation quaked, to its very foundation, in the struggle for life and liberty. But years, centuries long, were spent before the man was found who could lead our country through the wilderness. This special tact may be termed the power of coördination, or of adaptation of means to a given end. It is by no means always proportionate to strength of intellect, inventive genius, artistic or scientific ability. On the contrary, men of transcending talent have totally failed to make it felt, for the lack of a certain something to bring themselves before the world. It was said of a gigantic intellect, that, in politics, he put to sea on an ebb tide, and was stranded going out. What a museum of valuable inventions, scientific discoveries, artistic productions, poetry, music, and the like, is lost to the world, because its light is hid and nobody dares take the bushel off.

Let us now make an application of the principle we have been illustrating, to the physician.

The practice of medicine is one thing; to huckster drugs, look owlish, wheedle, drive fast, pull teeth, and slaver everybody in reach with unfledged advice is another thing—though frequently supposed by aspirants for public confidence, to be a good imitation. Probably, attached to no other vocation are there more inconsistent notions, weird fancies, and empty ideas mixed up with unsuitable counsel and mistaken effort.

Some think anatomy the keynote of success, and the fuller you sound it the better practice must be. Its importance is too evident to be questioned. But this department teaches the structure of the house you live in, not how to live. Another says, physiology should be the guide of your efforts. It teaches only the uses of parts. Nobody can live by knowing that windows are made to look out of, chimnies to smoke, and the cook-stove's function is to digest, and so on through every part of the structure. A third, suggests pathology for the basis of action. Men and women are not wanting who know the pathology of our present system of paper currency. But where is the doctor to cure it? Mathematics, botany, chemistry, and other branches, have their special advocates in this regard. Mathematics aid to tax and appraise, not augment assimilation. Botany will germinate ideas, and big ones too; yet they must have animal heat to thrive, about which chemistry can tell you.

Thus, we might go on, piling citation upon citation; but enough has been adduced to substantiate our point.

Medicine is a concatenation of sciences and an epitome of arts. To practise it successfully, one must marshal and lead these manifold elements, so as to cast in the depths of uncertainty a telegraphic cable between health and disease, to the end that the ailment of the patient may be known and relief dispatched to the suffering organs. In other words, the better you can yoke up medical science and art and then hitch them on to your team, the more weight you will carry through the world as a doctor; whether you attempt to handle the whole system, or concentrate your energies on a part.

Earnest, honest counsel, often fired with eloquence, is delivered to graduating classes. Sometimes, however, I have heard curious advice given to young men, and some not young, as they sat, diploma in hand, to receive the last lecture instalment. I have particularly noticed the suggestion, variously worded, for the newly plumed doctor, "to get on the right side of the women." As if women had any wrong side. Better let them take heed, lest there be so much wrong side to their professional ability that nobody can tell which the right side is. Believe me, that intuitive sense peculiar to women will esteem you, not as a medicine man, but as a *man* in medicine.

Another occasional injunction to graduates is to avoid quackery. The best of advice, but not always understood. Everybody knows what is commonly meant by quackery; but everybody does not know when and where it occurs. Is it not quackery, when a doctor pretends to understand a case, and knows he does not? Is it not quackery, when he treats a case without counsel, and at the same time knows there is somebody within reach of the patient's means, who understands it better than he does? Is it not quackery, for a doctor to send a prescription to a drugstore run by men of indifferent talent, bad habits—laziness, especially—and where whiskey is dispensed behind the counter, or somewhere else, yes, and in the free lunch at 11 o'clock style? Is it not quackery, when the doctor plays upon a patient's hopes by rote, because he cannot read his or her condition by note? Is it not fearful quackery, to become a denominational bigot in sectarian medicine? I will not continue this strain longer, lest it fill the hour.

We have seen how upon one's comprehension of a subject depends his practice. That this comprehension, or taking hold of in the mind—power of the understanding—may be diversely acquired; how exceedingly varied it is in quantity and quality among individuals; and, also, that it comprises a faculty "knowing no obstacle," by which it is allied to practical effort. All this applies with equal force to the acquisition of medical knowledge. Inasmuch as the latter pertains to the welfare of humanity, its study should be governed by a care, delicacy, and patience commensurate with the magnitude of the subject.

The true practitioner of medicine is a cosmopolitan student. He searches truth everywhere, that he may embrace it; and he also searches for error, that he may tread it down. He is a bookish man, and reads all sorts of books relating to his profession—regular, irregular, and defective—and as many more as he can. Like a searching man, he investigates all sorts of systems of medicine: allopathic, homœopathic, eclectic, hydropathic, electropathic, and nothingopathic, in order that he may develope discriminating talent. He is a man of observation, and allows nothing to escape attention, which may enlarge the understanding. His receptive mind always opens the door to entertain knowledge, come from whom or where it may. Taking care to learn but one thing at a time, it is correctly understood, and will be retained. Knowing the importance of executive ability to make knowledge available to the world, he aims to cultivate business talent, etiquette, economy, and politics; that he may know how to live among men. To these, still higher qualities should be added.

On a snowy night, millions upon millions of the white flakes descend from the heavens, though the darkness comprehends them not. Like birds, weary in flight, they lodge in the trees; palisade and stake are crowned as with opal; crystal tops out even the smoke stack; the farmer's soil is shielded from icy blasts; neither pauper-house nor jail is forgotten; for, with philanthropic zeal, these light-winged messengers strive to send them from the face of nature. How earnestly they cling to the charlatan's window, as if fain to repent him of his wickedness. Sidewalks and streets are paved with more than jasper gems. But dawn scarce comes, ere the chimney's new crest is blackened; morning's breath shakes free the branches; horses, tired at early call, nose off the posts; the unwholesome mist from the quack doctor's office despoils the purity of these harbingers of health; they are trodden down by man and beast. Soon this great fleecy mantle will have passed from before our eyes. Yet, ere long, it will again come, to gladden us anew. Therefrom the graceful willow shall spin its slender blossoms; the trees weave their wedding garments; and earth shall spread

her velvet carpet to receive the bridal train. What came tiny and gauze-clad, will turn the miller's wheel, bear great ships on its back, and dredge out the river's bed; it will fill the springs, where the cattle slake their thirst in summer's heat; shower gently down, set the bow in the clouds, and enter into myriad forms beside, in nature's great temple.

Gentlemen, the moments of life are snowflakes of eternity. Silently ever-coming, though comprehended not. Like the dove, they bring the olive-branch of peace; infancy and old age are crowned by their radiance; in their strength youth becomes invigorated, and manhood stately; with lavish hand they sustain us in wintry storms of trial; from their fulness, the poor hope for support, and the outcast for justice. These invisible missionaries ever work for the weal of mankind; unweariedly, they search out the heathen in their blindness—wherever they may be—to enlighten them. Scattered broadcast for all, are the priceless jewels of time.

But these visions unceasingly change: full vigor brings decline; the baby's smile turns to wailing; patients pass away; the olive-branch, green and fruitful, fades and withers; waves of adversity sweep away the sands of life; poverty slopes into penury; the exiled and downtrodden look for equity beyond the grave; reformers are ostracized, and barbarians smite philanthropists; opportunities, pregnant with success, are wasted; the barque of life, though launched amid balmy breezes, may go down in a tempest's billow. Yet, out of the incessant roll of the unfathomable mutations of our being, is the living temple built. Though bitter grief come, hopes fade, plans break, effort upon effort fail, friends prove false, society frown, and everything seem to oppose, there is, somehow, a hidden strength in the moments, the finite cannot trace, which may rear the fairest and noblest structure—a well-spent life.

Aim to comprehend and to so practise, that your living temple shall become the pride of the rich and the hope of the poor.

ARTICLE XIII.

FOUR AND A-HALF INCHES OF WHALEBONE IN THE UTERUS.—ABORTION.—NARROW ESCAPE FROM DEATH.

By M. M. EATON, M.D., Peoria, Ill.

March 30th, 1866, was called, in consultation, to see Mrs. G., living in Tazewell Co. Met the attending physician at her residence, who gave me the history of the case, as follows, *viz.:* He was called to see Mrs. G., aged about 30 years, March 29th; found her flowing profusely. She stated that she had had a miscarriage three days before, the afterbirth also being all delivered. He made an examination, but found nothing abnormal, save that the uterus was enlarged, the os somewhat dilated, and a general relaxed condition. He made use of the usual remedies and appliances. March 30th, was called to see Mrs. G. in great haste, the messenger stating that she was very low. On arriving at the house, a woman in attendance stated that Mrs. G. had told her that she had used a piece of whalebone to bring on a miscarriage, and had lost it in the womb. The Doctor found his patient in a truly alarming condition—almost speechless and pulseless, with the bed saturated with blood, and still flowing. On making a vaginal examination, and reaching very high up into the uterus, he detected some hard substance, but was unable to remove it; when he requested that I be sent for.

On entering the lady's chamber, I found her colorless, nearly pulseless, and hardly able to speak a word. Ordered her to have a drink of warm water with rye whiskey, and cold applied over the hypogastric region. In about 15 minutes, the pulse became stronger, and I proceeded, by request of the Doctor, to attempt the removal of the whalebone, if such it was. I easily reached the object with one finger, but the os was not large enough to admit of forceps being used at the same time,

and I was unable to sieze the whalebone with them. The whalebone lay transversely in the uterus, and I made an effort to bring down one end with my finger, and finally succeeded in hooking my finger over it and bringing it down; but it doubled on itself, and I removed it forcibly, without letting go my hold. I found the substance to be a very large whalebone (such as is used in umbrella frames), $4\frac{1}{2}$ inches in length, slightly pointed at both extremities. Ergota was immediately given, and followed by stimulants and tonics. I have since learned from the attending physician that she ultimately recovered.

I wish every woman in the land who is, or is tempted to be, guilty of the crime of producing abortion on themselves, or anyone else, could have seen this case. I am sure, if they could have done so, few would be found willing to subject themselves to such danger. This is but one out of thousands, it is true, where women resort to some means to rid themselves of unborn children; but, it is one calculated to impress the thoughtful mind with the danger women subject themselves to, who sin in this way against God and man, and furnishes us with a case to cite, to persuade ladies never to be guilty of such an act.

What numbers of American women are, to-day, dragging out a miserable existence themselves, and giving birth to scrawny, weakly children, because of their having taken so many drugs, "to get rid of them," as they say. I am sure many are barren who would now gladly have children if they could; but they cannot, because of the fact that they, when first married, thought to be smart, and not have any children until they got ready, and the means used either to prevent or destroy conceptions, has resulted in a permanent disability to conceive. Many are troubled with ulcerations, hemorrhages, tumors, misplacements, and inflammations, I conjecture, nay, I have been informed by the parties themselves in many instances, as they believe (and I judge, correctly), by reason of their efforts to rid themselves of the trouble of raising children; but a greater trouble has been visited upon them, and they uniformly repent their acts. Let others take warning.

Proceedings of Societies.

ALUMNI ASSOCIATION.

MINUTES OF THE MEETING OF THE ALUMNI ASSOCIATION OF CHICAGO MEDICAL COLLEGE, HELD MARCH 3D, 1868.

The members of the Alumni Association of Chicago Medical College met in the lower lecture-room of the College, immediately after the commencement exercises.

The President, Dr. J. S. Jewell, delivered an able address upon medical education, which was listened to with marked attention, and frequently applauded.

On motion, it was the unanimous wish of the alumni that the President be requested to furnish a copy of his address for publication in the CHICAGO MEDICAL EXAMINER.

Some amendments were then made to the Constitution and By-laws.

It was moved, by Dr. Fuller, and carried, that 400 copies of the Constitution and By-laws, as amended, including the President's address, be printed, and a copy sent to each alumnus.

Correspondence, and reading and discussion of papers then followed.

On motion, the Chairman appointed a Committee, consisting of Drs. John M. Woodworth, J. F. Kelsey, and A. W. Gray, to nominate officers, which Committee, after due conference, presented the following names, which were unanimously elected:

President—H. P. MERRIMAN, M.D., Chicago.

1st Vice-President—N. W. WEBBER, M.D., Naperville, Ill.

2d Vice-President—NORMAN BRIDGES, M.D., Chicago.

Sec'y and Treas.—S. A. MCWILLIAMS, M.D., Chicago.

The alumni were then notified that the Treasurer was ready to receive their annual dues.

No farther business appearing, the meeting adjourned.

S. A. MCWILLIAMS, M.D., *Sec'y.*

ANNUAL MEETING OF THE CHICAGO COLLEGE OF PHARMACY.

A meeting of the members of the Chicago College of Pharmacy was held March 10th, in their new rooms in Rice's building. The meeting was largely attended by the druggists and physicians of the city. E. H. Sargent occupied the Chair. The Secretary called the roll, and read the minutes of the last meeting.

REPORTS OF COMMITTEES.

The different Committees then reported. H. D. Garrison, on Apparatus, reported that many additions had been made to that of the College, but he did not know the exact condition of apparatus at this time.

Mr. Mills, on the Library Committee, reported that the Library fund amounted to $725, $500 of which had been appropriated by the Board of Trustees, to be expended in the purchase of books. The Committee suggested that the remaining portion of the fund be appropriated at this meeting for the same purpose.

The Committee on Lectures, reported that two lecturers could easily be obtained, and the matter had been referred to the Board of Trustees.

The Secretary and Treasurer's reports were then presented. The latter reported $1,500 in the Treasury Sept. 1, and gave the amounts that had been expended, which nearly covered the receipts.

Upon motion, the Special Committee on Lectures was discharged.

The Committee on Examination reported the names of several persons who had applied for membership. As several of the applications were without the necessary indorsement, members who were acquainted with the applicants were requested to indorse them.

PROPOSED PUBLICATION.

It was moved by Mr. Bartlette, that the Board of Trustees be, and are hereby, authorized to permit any person or persons

who may desire to establish, in this city, a monthly journal, devoted to the interests of chemistry, pharmacy, and the collateral sciences, and who shall present in writing a full prospectus of the enterprise, and shall give satisfactory evidence of their qualifications and responsibility, to publish the same by authority of the Chicago College of Pharmacy, and the authority so delegated shall continue so long as the requirements of the prospectus are fulfilled, or until the College may desire such a journal. The motion was carried without debate.

It was moved and adopted, that the Board of Trustees be empowered to take measures to give a course of lectures on pharmacy.

On motion, the Secretary was empowered to transmit a vote of thanks to Dr. J. H. Rauch, for a valuable donation.

On motion, the unappropriated Library fund was placed in the hands of the Trustees.

It was also resolved, that $300 be placed in the hands of the Trustees, to defray the current expenses.

PRESIDENT'S ADDRESS.

President Sargent then addressed the meeting substantially as follows:

GENTLEMEN:—Another annual meeting brings us together, and it becomes my pleasing duty to present to you a statement of what has been done by your officers, which, owing to the change of our Constitution, covers a space of only six months.

He congratulated them upon the increased prosperity of the College, and the prospect of greater future usefulness. But twelve months had passed since the reorganization, and it was not much to say that the College is far more prosperous than the most sanguine could have anticipated. But there remained much to be done before they could rank with older and more favored Colleges.

It was to be regretted that so little had been done towards giving a course of instruction, but it was hoped that this meeting would take the matter under consideration, and take steps necessary to its fulfilment.

Our city was large enough to furnish a class of students suf-

ficient to sustain a good course of lectures. There is not a druggist in Chicago whose clerks would not benefited by a course of lectures. For such lectures, but six hours a week would be required; and he thought that each clerk would be willing to devote a portion of his labor and leisure hours to study.

All desiring proper, competent clerks, would give preference to the graduates of the College of Pharmacy. Such clerks usually obtain a large salary.

The class in the Philadelphia College of Pharmacy numbers one hundred and fifty members, two-thirds of whom are from the city proper. Several Chicago clerks annually go to that College to obtain the advantages which cannot be found here.

The influence of Chicago will extend over the entire West. We may be sure that in a short time our classes will be as largely attended as those of any similar institution in the country.

We ought and can furnish the necessary talent to give the lectures; the only difficulty being to find the necessary time to write and deliver the lectures, but with suitable compensation the difficulty may be overcome.

From the Secretary we learn that six new members have united with the College since September, making the number 83.

The library now contains 125 volumes, comprising many of the best books in the language upon chemistry and collateral branches of sciences and art. The most complete and expensive books have been purchased rendering the library one of great utility.

In view of the great cost of scientific books, and the fact that their resources are limited, the speaker urged upon all to aid, by the donation of books and publications to the Society. He also suggested that the Committee on Library issue a circular, addressed to public libraries, officers and individuals, asking contributions. Publishers and dealers might also be included.

The cabinet had not been neglected, it now comprised over

700 specimens. Each one should make a selection from his private stock of what is needed. It only required a moderate outlay of time and money on the part of each one to make the Cabinet what it should be—a means of instruction. He called attention to the importance of having specimens of adulterations, and asked that each donate such as might fall under their notice. He also suggested that the Committee should solicit from abroad what could not be obtained at home.

He took pleasure in informing them that Mr. Ebert, who is now in Europe, had a collection of over 600 specimens, and promises many more.

Attention of the members was called to the subject of a cabinet of chemical and pharmacal apparatus. Such a collection would be as valuable as any other portion of our cabinet.

In January last, a lease was secured of a building now occupied, on very favorable terms.

He hoped that during the ensuing year, the College would be able to invite the American Pharmaceutical Association to meet in Chicago. The Association has held fifteen annual meetings: four times in New York, three times in Boston, twice in Cincinnati, twice in Baltimore, twice in Philadelphia, where they will meet again this year. The membership of our State ranks as the sixth in number, Chicago containing all but six, having forty-three members. The largest number of any Western City, except Cincinnati, which has sixty-one members.

Our revenue for the year now commenced is estimated will be about $500; the expenses, $400, independent of books and lectures.

Appropriations for current expenses should be made at this Session, as no money can be expended by the Trustees unless appropriated by the College.

The propriety of admitting wholesale druggists as associate members has been urged. It is desirable that as many of the members as can will become life members at once.

In conclusion, he urged upon all renewed interest in the work. In retiring from the office of President, he thanked them for the uniform courtesy they had shown him, and hoped

that they would choose some one who would perform more worthily the duties of President, and that they would support the new officer as heartily as they had done him.

At the conclusion of the President's address, which was greeted with considerable applause, an election of officers was had, with the following result:

President—E. H. Sargent.
1st Vice-President—J. W. Mill.
2d Vice-President—J. W. Ehrman.
Treasurer—J. P. Sharp.
Secretary—Louis Strehl.
Corresponding Secretary—Thomas Whitfield.
Trustees—Henry Biroth, W. F. Blocki, H. D. Garrison, Albert E. Ebert, and N. Gray Bartlett.

The meeting then adjourned.

Selections.

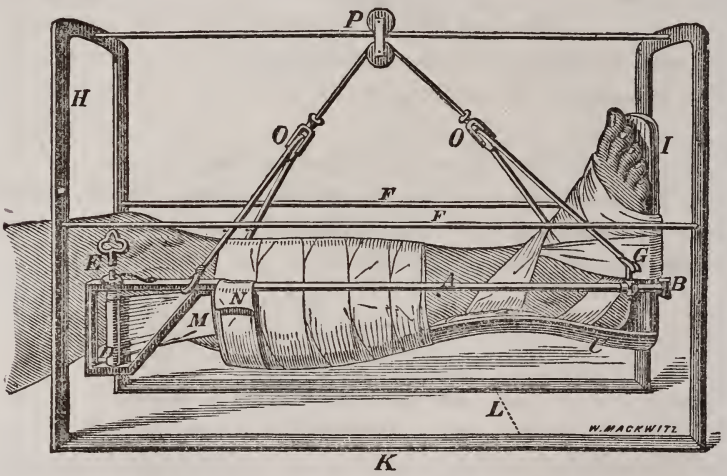
A SUSPENSION SPLINT, FOR TREATING SIMPLE AND COMPOUND FRACTURES OF THE LEG.

By E. A. CLARK, M.D., Resident Physician, St. Louis City Hospital.

The great necessity for a well adapted apparatus in treating fractures of the leg, suggested the utility of the instrument I have designed in the following woodcut, which, not only answers every practical purpose in treating this class of fractures, but also contributes very much to the comfort of the patient, who, while he is enabled to execute every movement of which the sound limb is capable, yet, cannot displace the fracture or modify the force of extension. In presenting this apparatus, I claim an advantage over those invented by Hutchinson, John Neill, Crandall, and Salter, not only for the means of extension and counter-extension, but also its adaptation to the treatment of compound fractures of the leg, as represented in figure No. 1. And considering the simplicity of this instrument, with its cheapness and application to every variety of fractures of the leg, will certainly give it the pre-

cedence with those who may venture to use it in a single case. The apparatus is such as may be made by any blacksmith, or indeed by any ingenious surgeon in a case of necessity, when a wooden frame and two hoops with a common iron pully will answer quite as well as the instrument which I have had made of iron on the following plan:

(Fig. No. 1.)

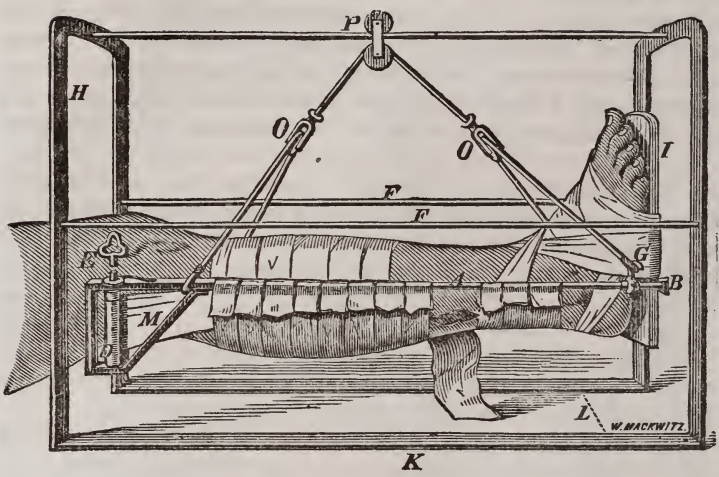


The two arches represented by the letter (H), at one end, are made of iron bars one-eight of an inch in thickness, and three-fourths of an inch wide. These arches are continuous with the bottom pieces (K), which support them upon the bed, and measure twenty-two inches in length, making the distance between the two arches, which are also supported on the sides by the two slender bars (F F). While the bar extending across the top, upon which the pully (P) glides, should be made flat, with the long diamater perpendicular so as to prevent it bending with the weight of the leg. The width of the arch under which the leg suspended—as indicated by the letter (L), should be 15 inches, and the arch 18 inches from the surface of the bed.

This description will be sufficient to indicate the proportions of the exterior apparatus. The bars represented by the letter (A), in which the leg is suspended, should be about two feet in length—unless when the fracture is too close to the knee, and it may be necessary to attach the adhesive straps (M) above the knee, then the bars may extend to near the peri-

neum if necessary. The crossbar passing beneath the bracket at (B), and upon which the foot rests, should be flattened and five inches in length, so as to allow ample space for the limb to rest between the bars; the space between these bars at the upper end should ordinarily be about six inches. The splint (C) upon which the leg rests in figure No. 1, should be fluted upon its upper surface so as to conform to the shape of the leg, while it is also made oval upon its under surface, so that both the leg and the splint may be included in the bandage shown in figure No. 1, by which means any displacement may be corrected in the fracture and the bones kept in perfect apposition. The foot piece (I) should be attached to the posterior splint at an obtuse angle, so as to correspond with the natural position of the foot. The foot is bound to this piece by means of adhesive straps which may embrace the whole of the foot, and extend partially over the ankle, but not so as to arrest the circulation, as by the figure of eight bandage formerly used around the ankle for making extension. The leg then, as seen in figure No. 1, is supported upon the crossbar passing under the bracket (B) attached to the foot-piece, and by resting upon the strap (N), pinned over the bars (A) on either side; while the extension and counter-extension is effected by means of the bar across the foot-piece below, and above by means of adhesive straps three inches in width, as indicated by the letter (M), which are attached to the sides of the leg, beginning just above the point of fracture and passing up to be wound around the cylinder (D), which is three and a-half inches in length, and turned by means of an ordinary clock key, represented by the letter (E). This cylinder is held in any position to which it may be turned, by a ratchet and wheel placed upon the upper surface of the bar, as indicated in the diagram—It will be observed in figure No. 2, that there is no posterior splint as in the other diagram, but the leg is supported entirely by strips of muslin pinned over the bars on either side, which renders this apparatus more appropriate for the treatment of compound fractures in which the wound may be examined and dressed when necessary, by removing one or more of these strips which may be replaced by new ones without disturbing the fracture. The attachment of the foot-piece in this dressing does not in any particular differ from that of figure No. 1. The means of suspension is the same in both these dressings, which, by means of the pully at the letter (P), the patient is enabled to move his limb, or even his body, forward and back to the extent of the length of the bar upon which it glides, and by means of the

(Fig. No. 2.)



cord playing over the under wheel in the same pully, the patient is able to flex and extend the knee by depressing or elevating the foot, which movement can be executed by a very slight effort on the part of the patient, while at the same time he can swing the leg from side to side to any extent within the space of the arches; and by means of the cords playing through the pulleys at (O O), the leg can be rotated to any extent, even to allow the patient to lie upon his side if he desires, without disturbing the fracture in the least. It will be observed in the diagrams that at the letter (G) there is a thimble, which can be made to slide upon the bar by means of which the lower end of the leg, can be elevated or depressed at the will of the patient, by sliding this thimble forward or back, and fixing it at any point by means of the little thumb screw attached to this thimble. In developing the utility of this apparatus for the treatment of fractures of the leg, I have tried various means of attaching the foot at the bottom, such as the muslin and flannel bandages in the form of a figure of eight around the ankle, covering the foot also, as far as the toes; but have always found them objectionable from the great amount of pressure and consequent arrest of the circulation in the foot, though the flannel bandage is much less objectionable than the muslin. But I have been able to obviate this objection, by the use of the adhesive plaster attached over the front of the foot, and around the foot piece, as shown in the diagram; this I have ordinarily found quite sufficient, unless in rare cases, when an

unusual counter-extending force is required, it may become necessary—as very aptly suggested by Prof. Hammer of this city—to pass a strip of adhesive plaster beneath the heel and around the foot-piece, which adds very much to the strength of the dressing. I have recently treated six cases of fractures of the leg with this apparatus, in which both bones were fractured, and in which there was more or less shortening in each case, with excellent results in all of them, without allowing the least deformity or shortening, while the patients were all grateful for the comforts allowed them by this apparatus during their confinement.—*The Humboldt Medical Archives.*

NEW YORK ACADEMY OF MEDICINE.

STATED MEETING DEC. 4th, 1867,

DR. ALFRED C. POST, President, in the Chair.

ON BLOOD-LETTING.

Dr. Post, by previous arrangement, opened the discussion upon the subject of blood-letting. After attending to the antiquity of the practice—it having been in vogue among the Egyptians, Assyrians, and other nations, and resorted to by Polydorus soon after the seige of Troy, endorsed by Hippocrates, and its rank as a remedial agent all through the period of Roman civilization,—he remarked as follows:

Notwithstanding its loss of reputation, partly caused by the abuse of its power, he contended that venesection was a remedy of great value, and in many cases it was indispensable; in other words, that it shortened the period of disease, and increased the prospect of cure.

Its effect upon the circulation was well marked, as evidenced by a decrease in the frequency of the pulse, a lowering of the animal heat, and a diminution in the volume of the artery. To use a conventional phrase, "the pulse rises," it becomes fuller, and the patient very often feels immediate relief. The effect of opening a vein is beautifully illustrated in peritoneal inflammation, for here the pulse being "*small*," an increase in force is more readily detected.

In acute inflammation, and in active determination of blood to important organs, the blood-letting plan of treatment was of substantial value. It relieved local pain. Among the other effects the Doctor alluded to free and copious perspiration, a tendency to syncope, nausea, emesis, and sometimes convulsions.

It may be judiciously employed from infancy to old age, although in the first mentioned stage of life, its application, perhaps for no very cogent reasons, was limited to the use of leeches. In advanced age great caution is required, but for the benefit of the over-timid, he cited two recorded cases. One that of a man aged 87, bled twice in one day; another aged 80, bled nine times for pneumonia. These in proof that even under this adverse condition, it was not so destructive to life after all.

The case of the late Dr. Cheesman, (who died in 1862, aged 75 years,) as related by Dr. Alonzo Clark, was also to be remembered in this connection, since he was evidently benefited by a copious bleeding.

Dr. Post then related several cases to fortify his position, one or two of which are here given.

A woman *æt.* 40, small and slender, with a pulse of inconsiderable force, but not remarkably compressible, being seized with a severe cephalalgia referable to the frontal region, sent for him. He administered the usual remedies, revulsive, cathartics, etc., but without effect. The patient then suggested bleeding, which Dr. P. had not before entertained, owing to its apparent contraindication. Her solicitation was backed by the assurance that previous bleedings in similar attacks had always afforded relief. The loss of something over a pint of blood from her arm verified her statement. He was subsequently called at long intervals, and bled the patient each time with the same result. After several years also, he was summoned at night to her bedside; she was in state of stupor, had a wild look, was unable to speak, but significantly pointed to her elbow. A full bleeding brought relief, and since then she has enjoyed comparative immunity from attack.

Case 2. A young clergyman, in the course of a platform speech, reeled and fell. Having a flushed face, full pulse, and great confusion of mind, he was bled, with marked and complete relief.

Dr. Post, in concluding his remarks, cited the case of strangulated hernia at the New York Hospital, upon which he had called the usual consultation of his colleagues, preliminary to an operation. In the interim, however, he directed the hard, tender, and tense tumor to be covered with leeches, when spontaneous reduction took place. He also referred to the benefits of the local abstraction of blood by leeches in the case of pneumonia in the very young subject, and in pneumonia generally, when no depressing influence is at work.

Dr. Anderson referred to the change in professional opinion regarding this matter, which would be more obvious by contrasting a period 25 years ago with the present time. He remembered having read the work of Dr. Armstrong on fevers, in which venesection was much praised, and it had occurred to him that following up the bleeding, with anodynes, would be eminently philosophical. While of this way of thinking, a gentleman, "a full, hearty liver," sent for him. The patient had great respiratory oppression, but no pneumonia; bleeding at once relieved him. In the case of Dr. Cheesman it would be proper to note, that more blood was lost than was originally intended, since the slipping of the bandage allowed the bed to become quite well ensanguined before the discovery was made.

Remarks were made by Drs. Woodhull, Foster, and Garish.

Dr. Van Buren said, at the beginning of his professional career it was thought impossible to initiate the treatment of pleurisy without a resort to blood-letting. In such cases the respiration did certainly become quite free. He also alluded to the benefit accruing from venesection in two cases of puerperal convulsions, before the days of chloroform.

Dr. Wooster gave in his testimony regarding the application of leeches between the shoulder blades,—especially in the case of young children suffering from pneumonia of a grave type. He was in every sense well pleased with the result.

Dr. Sayre was cognizant of a case where leeches were applied between the shoulders, and the child died in consequence. This had made a strong impression on him. Oiled silk jackets, poultices, etc., he regarded as much safer, and more serviceable.

Cases requiring prompt bleeding he regarded as quite rare. He did not wish to be understood as saying they never occurred, since he had himself carried a lancet in his vest pocket for 15 years, and had used it three times.

The change in our modes of treatment were due, he remarked, not to popular prejudice, but to the increased information of medical men. The starvation and the lancet plan had gone out of date; all were beginning to believe more in good food and good air.

Dr. Woodhull would hesitate to bleed, except in cases of sudden apoplexy.

Dr. Richards, after a few remarks by Dr. Van Buren concerning a change of type in disease, asked whether it might not be a change of opinion, and for the purpose of giving the junior members of the Academy an opportunity of expressing

their views, he moved that the discussion be resumed at the first opportunity.

The motion prevailed, and the Academy adjourned.

Stated Meeting, Feb. 5th, 1868. Dr. Alfred C. Post President, in the Chair. After the usual routine, business was transacted.

Dr. D. B. St. John Roosa read a paper upon *Congenital Deaf Mutism.* A short discussion ensued, when the President declared the continuation of the discussion on blood-letting to be in order.

BLOOD-LETTING.

Dr. O'Sullivan made the following remarks on the therapeutic effects of blood-letting:

Mr. President: The discussion on blood-letting, and the information elicited on that subject at a former meeting of the Academy, has been one of the most interesting and instructive to me as one of the Junior Fellows. The earliest lessons which I have learned in the study of medicine, have been intimately connected with the ideas prevailing at the time as regards blood-letting, and which governed the practice some years since.

When I commenced practice, I determined with all the zeal of a young practitioner, to test the merits of blood-letting thoroughly. In the neighborhood where I have resided for the past 11 years, there are several large founderies and machine shops, where hundreds of stalwart men are constantly employed. Here was a wide field for investigation, and so determined was I to give the subject a fair trial, that for several years I never went without a lancet in my pocket. I, however, began to perceive very soon that among this class of patients, who were apparently well able to stand depletion, I had to alter my views materially, and finally to abandon almost entirely the use of the lancet, especially in diseases affecting the respiratory organs. Now, sir, whether this is owing to the fact that this class of patients reside in ill-ventilated and crowded apartments, or that in their daily avocations they are constantly breathing a vitiated and poisoned atmosphere, or else to climatic reasons, I am not at present prepared to say. The fact however remains, that a certain degree of enervation exists among this class of patients, and that we must be very careful how we deplete them. In acute diseases of children I have never pursued the practice. I can say with a clear conscience, that I have never even applied a single leech, but on the contrary, endeavored to sustain my little patients from the

beginning, in every possible way, locally; the oil silk jacket and poultices sufficiently fulfil the indications for depletion.

In this connection I will briefly mention the history of an interesting case which occurred in my practice some eight years ago, and which I think strongly sustains my views on the subject.

In January, 1860, I received a telegram urgently calling me to Baltimore, to see a relative, who was a student at the theological seminary in that city. I left immediately by the Night Express train, arriving at five A.M. I at once proceeded to the seminary, and found the patient in a very debilitated condition, in the second stage of pneumonia; and, as I was informed by the nurse, and later by the medical attendant, that he had had no sleep for three days and nights. It was evident to me at a single glance, that if sleep was not speedily procured, delirium must ensue, and with necessarily a fatal result. I was further informed by both the physician and nurse, that at the onset of the disease the patient had been bled very freely (a large basin full of blood being taken from him) and that considerable debility had followed the venesection, and from which he had but imperfectly rallied when I saw him. The state of affairs can be readily imagined, when it is known that the patient was a mere anæmic youth of 19 years of age; of course, I need hardly say that the antiphlogistic regimen was also pursued. On auscultation, I found he had a very extensive pneumonia, involving both the lower and middle lobes of the lung, there had been applied extensive counter-irritation on the obsolete theory of its furthering resolution, a mode of treatment which the best clinical observers of the day have so fully refuted. In relating particulars, the attending physician expressed his surprise, that notwithstanding he had administered large doses of opium in a concentrated form, no sleep had been procured, and that in his opinion the case was very serious, and an immediate fatal result was highly probable. He asked my views of the case, and what I would suggest in the present emergency. I said I very much regretted the treatment he had pursued in the earlier stages of the disease, that in so young and weak a patient, instead of depletion, sustaining treatment of a decided character should have been pursued from the very beginning, that had such a course been adopted, the solidification would not be so extensive, nor the debility be so extreme. I suggested at once the most heroic sustaining treatment; beef-tea, tonics, stimulants, etc. Being then unacquainted with any of the profession in Baltimore, I telegraphed

to a distinguished Fellow of this Academy, who kindly sent me the names of some prominent physicians in Baltimore, with one of whom an immediate consultation was had, and who fully endorsed my views of the treatment of the case; and on the first night on a few grains of Dover's powder the patient enjoyed three hours of most refreshing sleep, resting as placidly as an infant. I, with the nurse, watched him the whole night. Now for the sequel: the pneumonia was cured, but the patient was lost, as he died of phthisis some six months later. The deduction I have drawn is, that the immediate and predisposing cause of the fatal result in this case, is attributable to excessive depletion on the one hand, and defective nutrition on the other. I would mention further, that the young man inherited no predisposition to the disease of which he died—his relatives on both sides were not tainted with the disease, many of them living to an extreme old age. During the collegiate course of the patient in New York city, he was under my constant supervision, and was never to my knowledge sick for a single day.

No further remarks having been offered, the meeting adjourned.—*Phila. Medical & Surgical Reporter.*

AN ESSAY ON THE THERAPEUTIC VALUE OF CERTAIN ARTICLES OF THE MATERIA MEDICA OF RECENT INTRODUCTION.

By JOHN H. GRISCOM, M.D., of New York City.

Read before the New York Medical Society, Feb. 4, 1868, and Reported for the *Philadelphia Med. and Surg. Reporter.*

SULPHITE OF SODA.

In view of the serious responsibility imposed upon all practitioners of medicine, and actuated by the consideration of the duty belonging to each one to keep his colleagues advised of every additional item of experience that may from time to time accrue to him, I solicit the favor of a few minutes attention of this society, for the presentation of the results of an extended and successful experience with the employment of two articles of the materia medica, of comparatively recent introduction. I refer to the *sulphite salts of soda*, and to *glycerine;* the first as an *internal*, and the second as an *external* remedy; with the first named, I have, during the past two years, had a most gratifying successful experience in a large variety of disorders, finding it to afford relief in very numerous cases in which the

usual articles of the materia medica, adapted to previous experience, have sometimes failed, but in which this article has failed in scarcely a single one of over three hundred instances of its administration in those cases to which, according to my theory of its modus operandi, it was specially adapted.

The chemical composition of this material is as simple as that of any other salt—its two ingredients, *sulphurous acid* and *soda*, being well known. The acid constituent, in its separate form, has been long appreciated as one of the most effective antiseptics and deodorizers when used externally. In fact, it is one of the most ancient disinfectants, having been originally employed in its gaseous form, generated by the simple combustion of sulphur. As an antiseptic, a preventer of decomposition and of fermentation, and as a sustainer of the natural composition of nearly all vegetable and animal materials, it appears as useful in the interior, as in the exterior of the organization. On this principle, its efficacy as a remedial agent is chiefly founded, but I have been led to the conclusion that it has an additional value as a prompter of digestion, in cases in which the gastric juice may be deficient in some of its acidulous ingredients.

Preliminary to the discussion of the modus operandi of this article, I ask attention to a few remarks upon the fundamental nature and character of diseases in general. Of the numerous branches of medical science, which it is the duty and the interest of its practitioners to investigate and become well acquainted with, having a bearing on treatment, there is none of more profound, complicated, and important character, than the

ETIOLOGY OF DISEASES.

Upon familiarity with this department of professional knowledge, depends in a large degree the capability of addressing remedial, as well as preventable measures. This subject applies not only to the *external* causes of disturbance of the physiological functions, but likewise to internal sources, in other words, to the pathological conditions provocative of the symptoms indicative of deranged action.

Every practitioner of experience is familiar with the existence of a great number of disorders whose remote origin, and true pathological character, are difficult of comprehension, although their general characteristics and tendencies are well understood, as derived from repeated observations.

The mechanical organization and arrangements of the numerous and complicated structures which compose the animal

body, and the physical operations by which the functions of the various organs are carried on, are as well understood by the anatomist and physiologist, as are those of the steam engine, or any other apparatus, by the mechanic and engineer,—and as a general rule, the mode of treatment of almost any particular disease, is as plain to an experienced practitioner as is the management of a sailing vessel in a storm to an experienced seaman. There are occasions when the force of the winds, the blasts of lightning, and the turmoil of the sea, are impossible to be overcome, especially with a vessel of frail structure, whereby its loss becomes inevitable. So with the human constitution; its organic structure is frequently so feeble, and the opposition to the elements of life are so utterly overwhelming, that neither nature nor art is able to control them, and in a considerable number of the derangements with which humanity is afflicted, the *remote* causes are as little known and understood by the physiologist, as are the causes of hurricanes, and of thunder by the navigator.

Some diseases are known to be of a strictly specific character, derived from the introduction into the organism of some peculiar substance to which the idea of *poison* is veraciously applied, and whereby the natural functions are disturbed, and in many instances so extensively deranged, as seriously to impair the vital powers, and for the modification or counteraction of which, what is known as *specific treatment* is required. As examples of this class, we may refer to syphilis, variola, intermittent, and yellow fever.

The *chemistry of physiology* must be regarded as the true quarter whence the real nature of most idiopathic diseases is to be learned. There exists no other structure so complicated, delicate, and numerously varied in its chemical combinations. In none other is there to be found so large a number of the primary elements of nature; in no other laboratory is there so great a number and variety of operations; and it is owing either to the presence of some foreign matter, to the deficiency or surplusage of one or more of the natural ingredients, or to their mal-combination, that a majority of the diseases are to be properly attributed.

Carpenter, in his work on the Principles of Human Physiology, page 535, very properly remarks:

"From the part which the blood performs in the ordinary process of nutrition, it cannot be doubted that it undergoes important alterations when these processes take place in an abnormal manner. The alterations must be sometimes the

causes, and sometimes the effects, of the morbid phenomena, which constitute what we term diseases. Thus when some local cause affecting the solid tissues of a certain part of the body, produce inflammation in them, their normal relations to the blood are altered; the consequence is that the blood in passing through them, undergoes a different set of changes from those for which it is originally adapted, and thus its own character undergoes an alteration, which soon becomes evident throughout the whole mass of the circulating fluid, and is, in its turn, the cause of morbid phenomena in remote parts of the system. On the other hand, the strong analogy between many constitutional disorders, and the effects of poisonous agents introduced into the blood, appears clearly to point to the inference that these diseases are due to the action of some morbific matter which has been directly introduced into the current of the circulating fluid, and which has affected both its physical and its vital properties."

The symmetry of many diseases which do not immediately depend upon external causes, necessarily involves the idea of the presence of a morbific agent in the circulating fluid. For example, palsy from lead—the agent known to be mingled with the blood, and to be deposited in the parts affected. Among the most frequent causes of depravation of the blood is the retention in it of matters which should be removed by the excretory processes; *e. g.*, carbonic acid, if totally retained by the lungs, will occasion death in a few minutes. The retention of the materials of the biliary and urinary secretions is a fertile source of disorders of the system—often of fatal results.

The most remarkable cases of depravation of the blood by the introduction of matters from without, are those in which these matters act as *ferments*, exciting such chemical changes in the constitution of the fluid, that its whole character is speedily altered, and its vital properties impaired. Of the causes of blood depravity, one of the most prolific, direct, and most continually in operation, is that function upon which the entire structure of the body is dependent for its renewal and continuance, *viz.*, digestion and assimilation, in which must be included respiration, this being, in fact, the last act of digestion. Very numerous diseases are well known to derive their existence from either the imperfection of this function, or from the inclusion of improper material.

In Draper's Physiology, we are informed, page 77:

"The imputed control which the alkalinity or acidity of the digestive juices exerts in determining the result, illustrates the

important function discharged by common salt, which furnishes to the juices of the stomach and intestines the characteristic ingredients they require, by breaking up readily into hydrochchloric acid and soda, and *re*-forming at once whenever these materials are brought in contact."

Carpenter, in the work before quoted, remarks, page 503:

"This fluid (gastric juice) of which the existence has been denied by some physiologists, is not very unlike saliva in its appearance; it is, however, distinctly acid to the taste; and chemical analysis shows that it contains a considerable proportion of free muriatic acid, and also some acetic acid. The former must evidently be derived from the decomposition of the muriate of soda contained in the blood, the remote source of which is the salt ingested with the food. Besides these principle ingredients, the gastric fluid contains muriates and phosphates of potash, soda, magnesia, and lime."

Prof. Dunglison, in his work on Human Physiology, states:

"*The quantity of free hydrochloric acid was surprising;* on distilling the gastric fluid, the acids passed over, the salts and animal matter remaining in the retort; the amount of chloride of silver thrown down, on the addition of nitrate of silver to the distilled fluid, was astonishing."

Thos. Chambers, M.D., in his work on Digestion and its Derangements, remarks:

"It may be considered settled that for *healthy digestion, an excess of acid is necessary.* In dogs it may be considered as settled by the experiments of Drs. Bidder and Schmidt, that the necessary free acid in the healthy state is the hydrochloric. This is the result of eighteen experiments made upon the gastric juice of the animals named, after fasting from eighteen to twenty hours, in all of which there was found free hydrochloric, and not a trace of any organic acid. On the whole, the evidence at present seems to point to the conclusion, 1st, that most probably free *hydrochloric* acid is normally present in the healthy gastric juice when it freely exudes on the presence of a natural stimulus; 2d, that it is present in smaller quantities in man than in dogs; 3d, that in man it may be easily neutralized and rendered undiscoverable by the gastric juice being overpowered by a comparative excess of mucus or saliva, normally in excess in fasting, abnormally so in disease."

M. Schmidt, by recent observations made on the gastric juice of a woman having a gastric fistula, calculated that 580 grammes (about 24 ounces) were secreted in an hour, which would give 14 killogrammes (about 36 pounds) a day, being

about one-fourth the weight of the body. The following is given by M. Schmidt as the result of nine analyses of the gastric juice of the dog, obtained as pure as possible; 1000 parts contained:

Water,	973.062
Organic matter,	17.127
Phosphate of lime,	1.729
" magnesia,	.226
" iron,	.082
Free hydrochloric acid,	3.030
Chloride of potassium,	1.125
" sodium,	2.507
" calcium,	.624
Chloro-hydrate of ammonia,	.468

According to M. Velpeau, it is permanently acid in different degrees, a fact established by the experiments of Leuret, Lassaigne, Tiedeman and Gmelin.

Considering the exceedingly complicated character of this fluid, and the very profound nature of the chemico-physiological operations it is required to undergo in combination with the multiplicity of material imbibed as food and condiment, and it being the primary foundation of the "house we live in," it is clear that any deficiency in its chemical ingredients, or the presence of any material in the stomach upon which it cannot properly act, must result in deficient nutrition of the blood, and consequently of various parts, and possibly of the whole structure of the body.

To whatever circumstance indigestion may be owing, whether to deficiency of amount of gastric juice, the privation of some of its essential ingredients, or to a defective capacity of the circulatory or nervous functions, (upon the integrity of which this function is also largely dependent,) the contents of the stomach must undergo the decomposition and fermentation, which invariably occur with all dead animal and vegetable matter when confined in vessels where they are subject to the continued influences of heat and moisture. To this natural operation are due the generation of gases which give the symptom of flatulence, pervading both the gastric and intestinal organs; also the nausea and eructation of the food, so frequent in dyspepsia; and likewise the epigastric pains, so distressing in many instances; together with the diarrhœa, dysentery, colic, and hepatic congestion and torpor, so frequently resulting from the presence of the foreign masses thus retained, and impart-

ing, to a greater or less extent, foul and injurious ingredients to the blood by absorption.

My experience with the remedy referred to in the treatment of diarrhœa, dysentery, cholera-morbus, as well as dyspepsia, has been most decidedly beneficial. From five to twenty, forty, or sixty grains, according to the age of the patient and the severity of the symptoms, administered two, four, or six times a day, have, in almost every instance, had the effect of speedily arresting the discharges, and relieving the nausea and the colicky irritation. I could cite several cases in which its efficacy has proven as prompt as any other remedy before tried, and in not one have I seen any bad effect or failure. As to its *modus operandi* in these complaints, it seems to act in the double capacity of an antiseptic and astringent. On the latter principle, its influence appears sometimes almost as speedy and efficacious as opium. In cases of constipation derived from torpor of the liver, or deficient peristalic power of the intestinal tube, its corrective influence over almost all functions aids to restore a healthy action of the muscles of the bowels.

In dyspepsia its efficacy has been most marked, especially when the disorder is accompanied with flatulence and eructations of food. These symptoms are doubtless the result of the decomposition and fermentation of the foreign material in the stomach itself, from one or more of the causes before mentioned. In such cases the sulphite salt operates, in the first place, as a direct and powerful arrester and preventive of the decomposition of the food, in the same manner as it does on the outside of the body; and, in the second place, its acid consituent, either in its original sulphurous form, or by its advancement to the sulphuric form, doubtless compensates for some of the deficiency of the gastric juice, and in this way completes the digestive process as far as the gastric function is concerned. The form of administration which I have found most useful and successful in dyspepsia and its attendant circumstances, is in combination with tonics and carminatives, avoiding alcoholic stimulants on all occasions. My chief combination is tincts. of cinchonæ comp., and cardamoms, and syr. aurantii, with the sulphite salt in separate solution, combining the two at the time of administration.

It speedily arrests the fermenting process which the contents of the alimentary canal so frequently undergo, eliminating gases, producing symptoms of flatulence, and which doubtless in many cases is the cause of the diarrhœa, nausea, colic, and other attendant symptoms. For the arrestation of this pro-

cess of decomposition and fermentation, I have found no means equal to sulphurous acid in the form of a sulphite salt. In several instances in which flatulence was a very prominent symptom, one or two doses of the salt appear to have immediately arrested and removed it. As an illustration of its value in dyspepsia, the following extract is quoted from a letter received from a recent member of the General Government in Washington:

"*Washington City, Jan. 8, 1867.*

"Dr. J. H. Griscom.

"*Dear Sir*—You remember your medical prescription. I procured it; and from taking the first dose, I felt no more of that dyspeptic trouble. I took faithfully the twelve powders and the liquid, and believe they have been of more benefit to me than all the medicine I have taken for years. Since then, several of my friends have been complaining, in my presence, of the same trouble I had, and I have immediately given them the apothecary's number of your prescription, and in the only report I have had, it cured the gentleman just as it did me. I am not sure I shall not set up 'Doctor for Heartburn,' on your capital."

There is another disorder in which the intestinal canal is chiefly involved, and accompanied with other serious disturbances, in which, though it has not fallen to my lot during the past two years, to have obtained any experience in the treatment with this or any other remedy, having seen no case of it, I yet should unhesitatingly and with full confidence, administer it. I refer to *cholera Asiatica*.

Sulphuric acid, diluted in the form of a beverage, has gained, in France, considerable reputation in the treatment of epidemic cholera, its remedial effects being attributable to its antiseptic powers, and to its influence in destroying cryptogamic parasites and organic germs. In Sulphur*ous* acid we have a preparation of the same ingredients in different proportions, possessing the same advantages combined with the additional one of being a powerful antiseptic and deodorizer, in its native form, and then, by conversion into sulphur*ic* acid, possessing all the advantageous properties of the latter.

In any disease whatever, in which the digestive function is impaired, whereby the recuperative faculties of the entire system must be more or less diminished, the capacity of the sulphite in arresting the decomposition and fermentation, and thus preventing the additional trouble and increase of derangement necessarily resulting therefrom, is a most valuable *adjuvant*.

A marked illustration of this theory is found in typhus fever and other analogous disorders. In that species of derangements, the digestive powers are manifestly reduced, at the same time they are our principal reliance for the addition of the antitoxic remedies to the circulating fluid.

In the diseased condition known as *Scorbutus*, there is a most direct demand for proper alimentary material, and therein we find the sulphites valuable, not only as a means of suspending the fermenting process, but also, by the agency of both its acid and alkaline constituents promoting digestion itself.

But it is not alone upon the contents of the stomach and bowels, with which the salt comes in direct and immediate intercourse, that its antiseptic and antizymotic influence is exerted. This, as before suggested, is probably due to the action of the sulphurous acid derived from the decomposition of the salt. But there are many diseases of a zymotic character, derived from causes wholly independent of the digestive function, upon which this agent has been found to exert a curative influence as rapid and efficacious as in those already referred to.

We have several reports in medical journals, of its efficacy in intermittent and typhus fevers, in scarlatina, small-pox, and measles, the theory of its action in which is, that the acid is absorbed into the blood itself, and therein exerts its antiseptic properties directly upon the materies morbi which give rise to the disorders.

Even in yellow fever, the real chemico-physiological cause of which has not yet been satisfactorily made known, it was last summer, during the prevalence of that disease in the West Indies, reported by the medical officers of the British fleet, to have produced highly favorable results.

Its value in erysipelas I have had the gratification of testing in several cases. In one case in the New York Hospital, found on the face of a delirium tremens patient, a few doses of the salt wholly relieved that symptom in twenty-four hours. In this peculiar disorder there would seem to be a very plain reason for its usefulness, it being a disease whose source is most plainly derived from internal derangement of the blood, producing obstruction of the functions of the capillary circulation of the skin, thus giving rise to congestion and inflammation. That it is derived from some chemico-pathologic alteration of the blood, there can be no doubt, although we know not the true nature of the change.

In several cases of bronchial and pharyngeal catarrh, I have also observed singularly beneficial results from its administra-

tion in connection with local treatment. this disorder being considered as based upon the same foundation as cutaneous erysipelas.

The origin of many cases of idiopathic pneumonia, peritonitis, pleuritis, and other disorders embraced in the same nosological class, is a question of the highest scientific importance, both in relation to the nature of the disease and its treatment. In the remarks of Carpenter, before quoted, relating to the changes produced upon the blood by *local causes*, thus giving rise to morbid phenomena in distant parts of the system, we have an intimation of the influence of the alterations of the blood disturbing the capillary functions; whence it is easily perceivable that the so-called inflammatory affections just named may be the direct effects of morbific changes in the blood, introduced by other than local causes. In the treatment of these diseases and others of similar character, such as erysipelas, gastritis, enteritis, hepatitis, and all others of idiopathic origin, it is rational to look into the chemical condition of the vital fluid, both for their origin and for the means of restoring it to its healthful condition. There is one very common disorder, the chemical origin and cause of which is now almost universally admitted, and for which chemical anti-toxic treatment is very generally found available. I refer to rheumatism, which is known to be dependent upon a hyper-acetic condition of the blood, and capable of neutralization by the use of alkaline medicines. The alkaline salt, known as tart. pot. et sod. has proved in latter years to be an almost uniform remedy for all forms of this disease. In a recent paper on this topic by Professor J. H. Salisbury, of the Charity Hospital Medical College, Cleveland, Ohio, contained in the last October No. of the *Amer. Jour. of Med. Sciences*, we are presented with a very lucid exposition of the several varieties of this disorder illustrated by microscopic expositions. He remarks: "We have four or more types of rheumatism, which may be designated as follows: 1st, Lithic; 2d. Oxalic; 3d. Cystinic; 4th. Phosphatic." All of these acidulous conditions are discernable by microscopic examination of the blood, demonstrating the several primary elements by the varied character of the parent gland cells.

It is not unreasonable to suppose that these various changes are the results of imperfect digestion and assimilation, varying in character according to the nature of the dietary, or functional powers of the patients—improvement in both of which may, in very many cases, be secured by the subject of this paper.

The nervous system, in both its centres and branches being also dependent for its integrity and healthful energy upon its proper nutrition, there is equally good reason for the opinion, that many of its derangements, such as hysteria, neuralgia, and even paralysis and meningitis, may be due to imperfect or deranged nutrition, as certainly as is delirium tremens, and in many such cases, the use of an agent for the purification of the nutrient fluid may be found directly influential in restoring a sound state of that organization, and likewise as in almost all other functional disorders, it may be found to be an important adjuvant to other essential remedies.

A case of unexpected relief to the mental functions, derived from its administration for a physical disease, will presently be reported.

In that peculiar pathological condition of the blood and cutaneous organization which is manifested by the production of numerous furuncles, commonly known as boils, the administration of sodæ sulphis, in combination with the carminative tonics, has proved, under my observation, a very perfect and rapid remedy. The same remark is applicable to another cutaneous disorder, dependant wholly upon gastric derangement. I refer to *urticaria.*

During the preparation of this essay, the most extensive and violent case of this disease that ever fell under my observation, came under my care. It was a lady aged 17, who had suffered greatly for several days with nausea, sleeplessness, an eruption covering almost the entire cutaneous surface, and accompanied with excessively violent itching. In twenty-four hours, a few doses of forty grains each, of sodæ sulphis, combined with carminative tonics, and a local external application of a solution of the salt, relieved all the symptoms to a great extent, and in forty-eight hours, they all wholly disappeared, leaving the patient in good health.

Another application of this salt, which I have found both highly interesting and valuable, is, in the case of infants, by whom their natural food, the mother's breast milk, is frequently rejected.

A dose of two to five grains, in combination with a few drops of the tinct. card. c., sweetened with a little syr. aurantii, has in many instances proved directly successful in causing a retention and assimilation of the stomach's contents, when administered soon after imbibition, thus greatly promoting the health and strength of the juvenile.

There are three forms of this salt, *viz.*, the sulphite, the hy-

posulphite, and the bi-sulphite—the first of which has been my principal dependence, though the others, when employed in proportionate quantities for the supply of the acid constituent, are equally useful. The only objection to the bi-sulphite is its being somewhat uncertain as to the proportions of acid contained in it, unless kept in solution, as a portion of the gas is liable to escape when exposed to the air in the crystaline form. —*Phila. Medical and Surgical Reporter.*

Book Notices.

Treatise on Diseases of the Eye, Including the Anatomy of the Organ. By Carl Stellwag Von Carion, M.D., Professor of Ophthalmology in the Imperial Royal University of Vienna. Translated from the Third German Edition, and edited by Charles E. Hackley, M.D., Surgeon to the New York Eye and Ear Infirmary, Physician to the New York Hospital, Fellow of the New York Academy of Medicine, etc., and D. B. St. John Roosa, M.D., Clinical Professor of the Diseases of the Eye and Ear in the Medical Department of the University of the City of New York, etc. With an Appendix by the Editors. Illustrated by Ninety-Six Wood Engravings and Eighteen Chromo-Lithographs. New York: Wm. Wood & Co., 61 Walker Street. 1868.

This is a full-sized octavo volume of 774 pages, published in excellent style. There is not, within our knowledge, any one volume, accessible to the American student and practitioner, which affords so complete a view of the present state of knowledge in relation to the organs of vision and their diseases, medical and surgical, as the one before us. The editors and publishers have conferred a real favor on the profession. For sale by W. B. Keen & Co., 148 Lake Street.

The Principles and Practice of Obstetrics. By Gunning S. Bedford, A.M., M.D., Prof. of Obstetrics, the Diseases of

Women and Children, and Clinical Obstetrics in the University of New York; Author of Clinical Lectures on Diseases of Women and Children. Illustrated by Four Colored Lithograph Plates and Ninety-nine Wood Engravings. Fourth Edition, carefully revised throughout, and enlarged. New York: Wm. Wood & Co., 61 Walker Street. 1868.

The work on Obstetrics, by Prof. Bedford, is already so well known to the profession, that any comments in relation to its general merits are unnecessary. The present edition has been thoroughly revised, with the addition of some new matter. The publishers have done their part of the work well. We freely commend the work to the patronage of our readers, whether students or practitioners. For sale by medical booksellers generally.

A Practical Treatise on the Diseases of Women. By T. Gaillard Thomas, M.D., Prof. of Obstetrics and Diseases of Women and Children in the College of Physicians and Surgeons of New York; Physician to Bellevue Hospital; Consulting Physician to the State Women's Hospital, etc., etc. With Two Hundred and Nineteen Illustrations. Philadelphia: Henry C. Lea. 1868.

This is an octavo volume of 625 pages. Its typographical execution and binding are excellent; and we doubt not its contents are correspondingly interesting and valuable, though we have not yet commanded sufficient time to examine them in detail. The well-known ability and industry of the author will justify a full recommendation of the work. For sale by W. B. Keen & Co., 148 Lake Street.

Lectures on Orthopædic Surgery. Delivered at the Brooklyn Medical and Surgical Institute. By Louis Bauer, M.D., M.R.C.S.. Eng., Prof. of Anatomy and Clinical Surgery; Licentiate of the New York Medical Society; Member of the New York Pathological Society; Member of the American Medical Association; Corresponding Fellow of the London

Medical Society, etc., etc. Second Edition, revised and augmented, with Eighty-four Illustrations. New York: Wm. Wood & Co., 61 Walker Street. 1868.

This edition of Dr. Bauer's work embraces 336 octavo pages, being much larger than the first edition. The author is an earnest, thoughtful investigator and experienced practitioner; and our readers will find his work a valuable addition to their libraries. For sale by W. B. Keen & Co., 148 Lake Street.

Editorial.

Medical College Commencements in Chicago.—Several weeks since, Rush Medical College closed its regular annual college term, by conferring the degree of M.D. upon 120 candidates for graduation. The degrees were conferred by the President of the College, Prof. J. V. Z. Blaney, and the regular valedictory address was delivered by Prof. R. L. Rea. The exact number of students in attendance during the past winter we have not seen stated, but think it was not far from 275.

The Chicago Medical College celebrated its ninth annual commencement on the 3d of March. The afternoon of the preceding day had been spent in the reading of theses by their authors, and the *public* examination of the candidates for graduation. At the commencement proper, the President of the Faculty first delivered the certificates to such members of the Junior Class as had passed satisfactory examinations in the Junior Series of branches, accompanying the same by a brief exhortation in relation to the further prosecution of their studies. Certificates were next given by the Professor of Clinical Surgery, to those members of the class who had served a specified time as dressers in the surgical wards of Mercy Hospital.

Dr. J. S. Hildreth, Surgeon to the Eye and Ear Department of the County Hospital, conferred special certificates on seven

of the candidates for graduation, who had not only attended his clinics in the Hospital, but had also passed a satisfactory examination by him, on the subject of Ophthalmology. He accompanied the certificates by a short and very appropriate address.

The Committee of the Faculty, appointed for that purpose, awarded the prize for the best thesis to Nicholas Senn, and for the second best to D. W. Nolan.

The President then conferred the degree of Doctor of Medicine on 45 regular candidates for graduation, and 5 *ad-eundum* and honorary degrees on practitioners who had been properly recommended for that purpose. The delivery of the diplomas was accompanied by a brief and impressive charge to the graduates, concerning the nature and importance of the duties and responsibilities they assumed in entering upon the active practice of the profession of medicine.

E. S. Cleveland, in behalf of the class, responded to the charge of the President in a very neat and appropriate address.

The exercises were closed by a valedictory address by Prof. E. Andrews, on the Recreations of the Physician; a subject which was treated in a most interesting and instructive manner.

It will be seen by this brief statement, that the Chicago Medical College, though organized, from its first establishment, on the basis of a long lecture-term; consecutive order of studies (the branches being divided into junior and senior series), annual examinations; and hospital clinical instruction as an integral part; with higher lecture-fees than any other school in this region; has advanced with steadiness and rapidity to a high degree of prosperity.

Indeed, the City of Chicago has not advanced more rapidly in her commercial or material interests than she has in the growth of her medical schools. Ten years since, she had but one medical college and one hospital. The number of medical students in attendance was about 130, and the number of degrees conferred about 40. Now we have 2 colleges, 4 hospitals, 400 students, and 170 graduates, making her rank next to New York and Philadelphia, as a great centre of medical college and hospital instruction.

Alumni Association of the Chicago Medical College.—The first anniversary meeting of this association was held in the College Hall, immediately after the close of the commencement exercises. The President of the Association, Professor Jewell, delivered an address on the subject of Medical Education. He advocated the immediate adoption of all the recommendations of the Cincinnati Convention, and presented the whole subject in a style so clear and interesting as to fix the attention and elicit the approval of his audience.

Illinois State Medical Society.—The next Annual Meeting of the Illinois State Medical Society will be held in the City of *Quincy*, commencing on the *Third Tuesday* in May, 1868. It is very desirable that the profession throughout the State should be well represented.

N. S. DAVIS,

March 26th, 1868. *Permanent Sec'y.*

AMERICAN MEDICAL ASSOCIATION.

Office of Permanent Secretary, Wm. B. Atkinson, M.D.,
S.-W. Cor. Broad and Pine Sts., Phila.

The Nineteenth Annual Meeting of the American Medical Association will be held in Washington, on Tuesday, May 5th, 1868, at 11 o'clock A.M.

The following Committees are expected to report:

On Ophthalmology, Dr. Jos. S. Hildreth, Illinois, Chairman.
On Cultivation of the Cinchona Tree, Dr. J. M. Toner, D.C., Chairman.
On Surgical Diseases of Women, Dr. Theophilus Parvin, Ind., Chairman.
On Rank of Medical Men in the Navy, Dr. N. S. Davis, Ill., Chairman.
On Insanity, Dr. C. A. Lee, N.Y., Chairman.
On American Medical Necrology, Dr. C. C. Cox, Md., Chair'n.
On Leakage of Gas-Pipes, Dr. J. C. Draper, N.Y., Chairman.
On Medical Ethics, ——— Chairman.
On Plan of Organization, Dr. C. C. Cox, M.D., Chairman.
On Provision for the Insane, Dr. C. A. Lee, N.Y., Chairman.
On the Climatology and Epidemics of Maine, Dr. J. C. Weston; of New Hampshire, Dr. P. A. Stackpole; Vermont, Dr.

Henry Janes; Massachusetts, Dr. Alfred C. Garratt; Rhode Island, Dr. C. W. Parsons; Connecticut, Dr. E. K. Hunt; New York, Dr. W. F. Thoms; New Jersey, Dr. Ezra M. Hunt; Pennsylvania, Dr. D. F. Condie; Maryland, Dr. O. S. Mahon; Georgia, Dr. Juriah Harriss; Missouri, Dr. Geo. Engelman; Alabama, Dr. R. Miller; Texas, Dr. T. J. Heard; Illinois, Dr. R. C. Hamil; Indiana, Dr. J. F. Hibberd; District of Columbia, Dr. T. Antisell; Iowa, Dr. J. W. H. Baber; Michigan, Dr. Ab'm Sager; Ohio, Dr. W. Russell; California, Dr. F. W. Hatch; Tennessee, Dr. Joseph Jones; W. Virginia, Dr. E. A. Hildreth; Minnesota, Dr. Sam'l Willey.

On Clinical Thermometry in Diphtheria, Dr. Jos. G. Richardson, N.Y., Chairman.

On the Treatment of Disease by Atomized Substance, Dr. A. G. Field, Iowa, Chairman.

On the Ligation of Arteries, Dr. Benj. Howard, N.Y., Ch'n.

On the Treatment of Club-Foot without Tenotomy, Dr. L. A. Sayre, N.Y., Chairman.

On the Radical Cure of Hernia, Dr. G. C. Blackman, Ohio, Chairman.

On Operations for Harelip, Dr. Hammer, Mo., Chairman.

On Errors of Diagnosis in Abdominal Tumors, Dr. G. C. E. Weber, Ohio, Chairman.

On Prize Essays, Dr. Chas. Woodward, Ohio, Chairman.

On Medical Education, Dr. A. B. Palmer, Mich., Chairman.

On Medical Literature, Dr. Geo. Mendenhall, Ohio, Chairman.

Secretaries of all medical organizations are requested to forward lists of their delegates, as soon as elected, to the Permanent Secretary.

W. B. ATKINSON.

JUST PUBLISHED.

A Complete List of the Muscles of the Human Body, by WILLIAM LITTLE, M.D., Chicago. A Chart, size 24x38, giving the name, origin, insertion, and use of all the muscles in the Human Body. Price 50 cents; mounted on rollers, $1.50.

Also, the Cranial Nerves, Twelve Pairs, giving the name, origin, foramen of exit, distribution, and function. Price 20 cents. Address, WILLIAM LITTLE, M.D.,

220 Indiana St., Chicago.

Mortality Report for the Month of February:—

CAUSES OF DEATH.

Accidents	6	Croup	12	Measles, following the	3
Apoplexy	6	Debility	12	Meningitis	5
Bowels, inflammation-	2	Diphtheria	6	Paralysis	2
Brain, congestion of	6	Dropsy	3	Peritonitis	4
Brain, disease of	2	Dysentery	4	Phthisis pulmonalisis	41
Brain, inflammation	5	Encephalites	2	Pneumonia	52
Birth, premature	9	Fever, puerperal	5	Pneumonia, typhoid	2
" still	36	Fever, scarlet	5	Scrofula	2
" tedious	1	Fever, typhoid	7	Small-pox	33
Bronchitis	7	Heart, disease of	7	Tabes mesenterica	9
Bronchitis, capillary	4	Hydrocephalus	8	Teething	5
Cerebritis	2	Inanition	8	Varioloid	2
Childbirth	3	Lungs, hemorrhage of	2	Unknown	2
Cholera infantum	2	Lungs, congestion of	5		
Convulsions	41	Measles	24	Total	423

Deaths in Feb'y, 1868, 423 | Deaths in Feb'y, 1867, 265 | Decrease, 158
Deaths in January, 1868, 438 | Increase, 15

AGES.

Under 5	254	40 to 50	22	90 to 100	0
5 to 10	25	50 to 60	3	100 to 110	0
10 to 20	15	60 to 70	12	Unknown	0
20 to 30	42	70 to 80	8		
30 to 40	38	80 to 90	4	Total	423

Males, 221	Females, 202	Total, 423
Single, 335	Married, 88	Total, 423
White, 420	Colored, 3	Total, 423

NATIVITY.

Chicago	198	Germany	41	Russia	0
Other parts U. S.	104	Holland	9	Scotland	4
Australia	0	Ireland	30	Sandwich Islands	0
Belgium	0	Isle of Man	1	Sweden	10
Bohemia	1	Norway	10	Switzerland	0
Canada	3	Nova Scotia	1	Wales	0
Denmark	0	Prussia	5	Unknown	0
England	7	Poland	0		
France	1	Prince Edward Isla.	1	Total	423

MORTALITY BY WARDS FOR THE MONTH.

Ward.	Mortality.	Pop. in 1866.	One death in		Ward.	Mortality.	Pop. in 1866.	One death in	
1	10	9,668	1,208	1-2	14	25	12,108	448	12-27
2	21	12,985	811	9-16	15	47	15,766	404	1-4
3	18	15,738	655	9-12	16	35	14,912	573	7-13
4	19	10,884	380	1-8	County hosp.	10			
5	30	9,610	536	1-9	Hos Wom. Chi.	3			
6	18	10,680	391	7-9	Soldier's Ho.	1			
7	43	18,755	538	5-35	Home of the Friendl's,	2			
8	17	10,429	453	10-23					
9	20	13,940	422	14-33	Marine hos.,	0			
10	17	11,416	634	2-9	Mercy hos.,	1			
11	32	12,924	359		St. Luke's hos.	0			
12	28	12,695	396	2-3	St. Jose. asyl.	6			
13	16	8,188	629	11-13	Lake Hosp.,	4			

Total, 423

DEATHS BY SMALL-POX.

For the Month of February, 1868.

1st Ward	2	11th Ward	2
3d Ward	1	12th Ward	1
4th Ward	1	15th Ward	4
5th Ward	4	Lake Hospital	4
6th Ward	1		
7th Ward	6	Total,	33
8th Ward	2	January, 1868,	27
9th Ward	4		
10th Ward	1	Varioloid, 2d Ward,	2

CITY PHYSICIAN'S REPORT.

It appears from the Report of the City Physician, that

The whole number of patients remaining in Hospital, February 1, was 45
Admitted during the month, 68

Total, 113

Discharged cured, 61; Died, 6; Remaining at Hospital, 46;

The complaints of those who were discharged cured were:

Variola confluens, 20; Variola coherens, 15; Variola discreta, 21; Rubeola, 4; Scarlatina, 1.

Five persons died of variola confluens and one of phthisis teberculosis. Of the above five, three had never been vaccinated, and the other two had been vaccinated, but it had not taken.

The diseases of those now in the hospital are as follows:—Variola confluens, 18; Variola coherens, 12; Variola discreta, 16.

Money Receipts to March 27th.—Drs. S. P. Breed, $3; A. W. Gray, 3; Geo. Fredigke, 3; J. F. Kelsey, 3; D. B. Trimble, 3; John P. Seebold, 3; Jas. M. Barlow, 3; W. A. Fox, 3; G. L. Henderson, 3; A. H. DePuy, 3; Asher Goslin, 3; Carter & Frazey, 3; R. C. Moore, 6; H. A. Chase, 3; J. B. Cloud, 3; W. W. Duncan, 3; John D. Wood, 3; W. H. Lyford, 3; J. H. Reynolds, 3; C. G. Reim, 3; A. A. Dunn, 3; G. Bradley, 1.50; John Walker, 3; F. B. Etheridge, 6.

TO PHYSICIANS.—His attempts to extend a more advanced knowledge of his specialty to physicians already in practice having been so favorably commented upon by those of the profession who have attended the previous courses, and by the medical press. **PROF. HORATIO R. STORER,** Will deliver his third private course of twelve Lectures upon the

TREATMENT OF THE SURGICAL DISEASES OF WOMEN,

During the first fortnight of June, at his rooms in Boston.

Fee $50; and Diploma required to be shown. Certificates of attendance upon the courses already completed have been issued to the following gentlemen: Drs. J. B. Walker, Union, Me.; Alexander J. Stone, Augusta, Me.; Daniel Mann, Pelham, N.H.; Augustus Harris, Colebrook, N.H; J. W. Parsons, Portsmouth, N.H.; E. F. Upham, West Randolph, Vt.; G. E. Bullard, Blackstone, Mass.; J. A. McDonough, Boston, Mass.; J. G. Pinkham, Cambridge, Mass.; James Coolidge, Athol, Mass.; Thomas G. Potter, Providence, R.I.; C. M. Carleton, Norwich, Conn.; I. Farrar, Hartford, Conn.; M. C. Talbott, Warren, Pa.; H. Gerould, Erie, Pa.; W. W. Bancroft, Granville, Ohio; A. I. Beach, Bellville, Ohio; Henry E. Paine, Dixon, Ill.; W. L. Wells, Howall, Mich.; and W. A. I. Case, Hamilton, C.W.

Hotel Pelham, Boston, January, 1868. feb3t.

Average Duration of Life in Italy.—The director of the Italian Life Assurance Society, M. W. Rey, has published some interesting statistics showing the average duration of life in Italy as compared with that in other countries, from which it appears that the mortality of Italians is exceptionally great. He shows that in Italy, 22½ per cent. of the infant population die yearly, and that, even in the healthiest districts, the average duration of life is 33.43 years only, while in France it is 38.33, at Geneva, 42.02, and in England, 39.31. The number of births, too, is relatively much smaller in Italy than in England and France.

Lamentable Death from Chloroform.—A young lady, the wife of a lieutenant-colonel in the Confederate army, died recently at Gallatin under very painful circumstances. Being near confinement, and suffering during the night with great pain, she inhaled some chloroform on her own account. She laid the handkerchief upon her chin and fell asleep. In the morning she was found dead. This circumstance goes to prove how dangerous a plaything chloroform is.

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N. S. DAVIS, M.D., Editor.

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ARTICLE XIV.

REPORT ON THE SANITARY CONDITION OF THE CITY OF CHICAGO, AND THE PREVALENCE OF DISEASES FROM OCTOBER 1st, 1867, TO APRIL 1st, 1868.

By N. S. DAVIS, M.D., Member of Sanitary Committee.

Since the date of my last report to this Society, no diseases of a strictly epidemic character have been prevalent in this city. The meteorological conditions have been less variable, the extremes of heat and cold less, and the wet or rainy days less than the average of winter and spring months in this locality.

The small-pox has continued to find victims amongst our heterogeneous population, in numbers sufficient to materially increase the aggregate mortality. The deaths from this disease were, in October, 20; November, 18; January, 39; February, 33; March, 37.

In the efforts made by those acting under the direction of the Board of Health and others, to stop the further prevalence of this disease by vaccination, two errors appear to have been committed in some instances. The first was, in not exercising due care in the selection and preservation of the vaccine used. I is certain that an unusually large number of cases have been

followed by bad results, such as large phagadænic ulcers, cellular abscesses, and persistent eruptions, both pustular and vesicular. In two children who came under my care, the vaccine pustules had been accompanied by the most intense inflammation, ending in gangrene, and the formation of foul ulcers extending half the circumference of the arm, with a very serious degree of constitutional disturbance. Four others that I saw, had very extensive ulcerations, but without gangrene. A few days since, a gentleman, past the middle period of life, called at my office to consult me about his arm. He had been vaccinated in early life, the cicatrix of which was still visible. Five or six weeks since, he had been re-vaccinated. It produced a moderate-sized pustule, which matured in the usual time and cicatrized, leaving nothing unusual in the scar. In about one week after the vaccine sore had healed, an eruption began to appear on the arm, in the vicinity of the vaccine scar, and has continued to the present time. The eruption presents two forms: one is pustular, presenting much the shape and size of the larger pustules of acne, and very painful; the other is vesicular, of the size of pemphigus, filled with a sero-sanguinolent fluid. Nearly all the eruptions had a dark purple color at the base, reminding one of syphilide. New pustules and vesicles had continued to appear from time to time, but were all located on the vaccinated arm between the shoulder and the elbow, except a single pustule which had appeared on the opposite arm. This patient denied ever having had syphilis in any form; neither had he been subject to cutaneous eruptions. None of the patients to whom I have alluded here, were vaccinated by myself, and I know nothing of the history of the vaccine matter used. From the reports and rumors on this subject, I think the bad results here alluded to have been sufficiently numerous to materially increase the prejudices against vaccination, in the minds of many of our citizens.

Such results can only be accounted for in three ways: First, by supposing the vaccine virus to have been taken from persons who were previously infected with syphilis or some other infectious disease. Second, by supposing that the vaccine virus,

though from pure and healthy subjects, had been so used as to undergo a putrefactive change, by which it had acquired the properties of a purulent infection. Might not this occur either from allowing the scab to be put up *too* moist, or still more by repeatedly, at different times, wetting and using from the same virus kept between two plates of glass. In this way, virus that had been productive of perfect results with many of the past cases vaccinated, might, in subsequent ones, prove bad. Third, by supposing the existence, in the individual vaccinated, of some latent constitutional disease, which the vaccine only serves to excite into activity. This is, doubtless, the true explanation of a large number of the cases.

The second error to which I have alluded, consists in a general neglect to examine the cases vaccinated at suitable intervals during the progress of the vaccine. Hundreds of those vaccinated are never examined after the operation is performed. If all the profession would make it a rule to examine carefully the vesicular stage of the vaccine sores, very many spurious cases would be detected and remedied, and some bad results, by a little treatment, would be greatly mitigated. Everything relating to vaccination should receive more systematic attention from the profession than is usually given to it.

Rubeola, or measles, has also continued unusually prevalent during the last four months. And, among the poorer classes especially, pneumonia has been a very frequent complication or sequel. In young children, the pneumonia has supervened insidiously in the lobular form, and proved fatal in a large proportion of the cases. From my own observations, I think the fatality has been greatly increased from the two following causes: First, a large proportion of the community no sooner suppose the child to have measles than they wrap it in thick blankets, keep the room inordinately hot, stop all ventilation, and industriously ply it with hot stimulating drinks, for the purpose of getting out and keeping out the eruption. A more cruel or injurious practice could not readily be devised. Second, during the active progress of the measles, the pneumonic or broncho-pneumonic symptoms are not distinguished from the

ordinary catarrhal symptoms that belong to the eruptive fever, and hence no danger is apprehended, and in many instances no physician is called until the latter has completed its course and the patient is found still becoming worse instead of recovering. The physician now finds the lungs hepatized and the vitality of the little sufferer so far exhausted that no remedies will avail. An examination of the monthly bills of mortality shows the following results: from measles, in October, 4; November, 8; January, 21; February, 24; March, 21. From pneumonia, in October, 11; November, 19; January, 49; February, 54; March, 28. These figures are much above the average from these diseases. Thus in the same months of 1866 and 1867, the returns were as follows: from measles, in October, 6; November, 1; January, 0; February, 0; March, 1. From pneumonia, in October, 3; November, 13; January, 11; February, 20; March, 12.

In relation to the prevalence of other diseases, we have observed nothing requiring special mention. There have been occasional cases of scarlet fever and diphtheria, and the usual prevalence of catarrhal and rheumatic affections. During the latter part of the continuous cold weather of January, attacks of meningitis, convulsions, and croup were more frequent. During the months of February and March, I have met with cases of diarrhœa and dysentery more frequently than is usual in those months. These, together with the peculiarly oppressive qualities of the atmosphere during the two or three warm days that occurred in the first starting of the frost and ice in the last of February, have caused me to look with some anxiety in reference to a return of epidemic cholera the coming summer.

The weekly and monthly reports of the Board of Health have led many to suppose that the past year has been unusually healthy in this city. This has been done by comparing the mortality of each month in 1867 with the corresponding month in 1866. The year 1866, as is well known, was characterized by a special epidemic of cholera, which added nearly 1000 to the gross mortality of that year, and hence does not afford a proper standard of comparison in reference to the ordinary

ratio of mortality. If we compare the ratio of mortality in 1867 with that of 1865, when no special epidemic was prevalent, it will afford a much better test and show very different results. Thus, the aggregate mortality for 1865 was 3663, the population 185,000, making the ratio 1 death to 50 of the population. The aggregate mortality of 1867 was 4604, the population 230,000, making the ratio 1 death to 49 of the population. This will be found fully up to the average ratio for the last 10 years.

In respect to the sanitary condition of the South Division of the city, which I represent, and, indeed, of all the Divisions of the city, there are visible simply the following improvements over past years, namely: fewer heaps of ashes and garbage, especially in the central parts of the city, and a somewhat less number of heaps of stable manure. The institution of a scavenger system, imperfect and irregular as it is, has materially lessened the winter accumulations of the kind just named; still manure heaps of respectable age are abundant in all parts of the city. Full out-door privies are still more abundant; and even ditches obstructed by both ashes and garbage are not wanting. The point of vital importance to the sanitary welfare of our city, however, seems to be almost overlooked or neglected. I allude to the overflow and thorough saturation of the soil during the spring, with water holding in solution all the products derived from macerating manure heaps, contents of privies, etc., and disappearing chiefly by evaporation so as to leave in the soil all the animal and vegetable matter previously held in solution, in a condition admirably adapted to undergo decomposition and evolve into the air a variety of actively poisonous products so soon as the higher temperature of summer is brought to bear on it. Were it not for this source of mischief, our wide streets swept freely by the winds from the lake and the prairie, would render Chicago one of the healthiest cities in our country. There are, however, at this time (April 1st), notwithstanding all the improvements made during the past year, whole sections of the city, closely inhabited, the soil of which is completely saturated and partially covered with

standing water, and over which are scattered a sufficient number of manure heaps and open privies to thoroughly impregnate the whole with both animal and vegetable matter. During the succeeding two months of cool weather, the excess of water will evaporate, leaving the animal and vegetable residue in precisely such a condition as is most favorable for the evolution of miasms, sporules, and fungi under the high temperature of July and August.

It is in vain to expect any marked or permanent improvement in the health of the city while such a state of things exists. The removal of ashes and garbage, and the sweeping of a few central streets, is all proper and necessary; but it has comparatively little effect on the health of the citizens. There may be some who think the great evil of stagnant surface water, in large parts of the city, is unavoidable, on account of the low and level character of the surface. This is true, however, only to a limited extent; for the larger number of the very worst places are fully accessible to surface drainage into good permanent sewers already constructed. Take, for instance, that part of the North Division lying between North Market Street and the North Branch of the river, and south of Division Street, large portions of which are now either overflowed or fully saturated with standing water. The middle and rear part of the lots fronting directly on sewered streets are, in very many instances, so covered with water that the stable and the privy are like islands, accessible only by planks or boards. And yet nothing is wanting, to relieve the whole, except one or two hours of labor in opening suitable channels to the street gutter.

In visiting some patients on Townsend, Bremer, and Wesson Streets two or three days since, I found the rear part of nearly all the lots fronting on these streets saturated with stagnant water and thoroughly impregnated with the contents of privies and stable refuse, and the street gutters full. On further examination, I found nearly all the inlets of the Chicago Avenue and other sewers in that region more or less obstructed. Six good laborers armed with hoe, spade, and axe, under the direc-

tion of a man of intelligence and common-sense, could have relieved the whole of that territory of its surface water in two days, and left it in such a condition that the subsequent showers of spring would have washed and aided in purifying the surface instead of macerating it for weeks, and returning into the air loaded with miasms.

In visiting a patient yesterday, at 605 West Lake Street, a few rods west of Union Park, I had occasion to pass the rear end of the lot. I found, not only the rear end of that lot, but the alley, and as far as I could see along the adjoining lots, more or less covered with standing water well impregnated with animal and vegetable matters. Yet, in the centre of Lake Street, directly in front of the whole block, was a good brick sewer, on such a level as to be capable of draining the whole, if there had been any side gutters leading into it. Scores of similar instances might be pointed out in the south and southwest parts of the city, but these are sufficient for illustration.

My principal object in calling the attention of the Society to this subject, is to urge the exertion of its entire influence in accomplishing the two following items:

First. The adoption by the Boards of Health and of Public Works, of proper ordinances requiring the owner or occupant of every lot in the city, to so connect its surface with the adjoining street gutters that all water falling upon any part of such surface shall have an unobstructed access to such street gutters.

Second. The adoption and rigid enforcement of a rule, that on the first breaking up of winter, which is generally the last week in February or the first in March, a sufficient force of laborers, under the direction of a suitable number of intelligent overseers, shall be employed to clear all obstructions, of whatever kind, from the entrances to the sewers, and from the street and alley and lot gutters.

By having the work done promptly, *at the time indicated*, it would not only prevent the long retention of the water belonging to the first spring freshet, impregnated with the accumulations of winter, but it would render every subsequent spring

shower a cleansing and purifying agent. It would cost no more to employ a sufficient number of men to do all the required work in ten days, at the exact season when it is of the highest degree of sanitary importance, than it would to keep a small number at work during the whole season, and have three-quarters of the work done so late in the season as to lose nearly all its value, in a sanitary aspect.

If our Board of Health shall continue much longer to keep a large number of sub-officials employed in making sanitary inspections, and gathering statistics to cumber the shelves of its office, and leave the most important part of all its sanitary work undone, or done so late in the season as to be of little practical value, it is certain that the great mass of tax-payers will soon begin to regard the whole machinery as a useless pecuniary burden. Every practising physician should feel an interest in maintaining an efficient system of sanitary regulations, and the accurate registry of statistics of births, marriages, and deaths. And it is from no desire to find fault with the present Board of Health, that I have called your attention to the foregoing topics, but from an ardent desire to aid in rendering its work more efficient and timely in the prevention of sickness and death.

ARTICLE XV.

THE SULPHITES IN ZYMOTIC DISEASES.

By P. G. KELSEY, M.D.

An Extract from an Essay read before the Allen Co. Medical Association, held at Fort Wayne, Ind., April 7th, 1868.

* * * * The use of the sulphites and hyposulphites in the treatment of zymotic diseases has attracted considerable attention of late, on the part of the profession, and very worthily I think, and having tested their virtues to some extent in my own practice with happy results, I will, with your permission, cite a few cases by way of testimony. I shall, at

present, refer more especially to the use of the *sulphite of soda* in variola, and not to detain you by indulging in a *preamble*, referring to authority, etc., I will give you the cases at once.

CASE I. E. S., soldier, home on furlough, *æt* 23, was taken sick March 11th, 1864, with fever, severe headache, cough, and pain in chest, which he supposed was the result of exposure before coming home. Was not aware of any exposure to *small-pox* and, of course, did not expect it. I was called the following day to see him, and the third day thereafter a bountiful eruption, of an unmistakable character, decided all questions of doubt, the entire body being covered as completely with the eruption of *variola* as it well could be, and the disease maintain the distinct form. During the first three days of the eruption, until it reached the vesicular stage, the usual course of treatment was followed. But on the *fourth* day of the eruption, at the suggestion of my then colleague but former excellent preceptor, Dr. Terry, who had noticed some account of its use, I commenced the use of the sulphite of soda, using the following formula:

℞. Soda sulphis,---------- ℥iv.
Syr. Glycyrr.,---------- ℥iij.
Aqua, ---------- ℥j.
M.

Of this mixture I ordered a teaspoonful every four hours, and with the result of rendering my patient far more comfortable in every particular, and apparently modifying the disease quite a considerable in the following 24 hours. Notwithstanding the advanced stage of the disease at the time of commencing this treatment, I am certain that through some agency the attack, which at the outset had presented the appearance of a severe case, though retaining the distinct form, was rendered comparatively mild and the pustular stage considerably shortened, some of the later vesicles aborting without going on to suppuration, so that my patient escaped with only a moderate pitting.

CASE II. Though not next in order in my diary, yet, from its relation to the foregoing case, I will next give that of an

infant, female, which was in the house and exposed to the above case. The child was but six weeks old at the time of exposure, from which fact, together with that that the disease is not generally considered as easily communicable during the primary stages, I refrained from vaccinating the babe, although this was promptly attended to with all other inmates of the household, who were, also, immediately sent away, save one lady, a sister-in-law, who remained to attend to the young man. Since all escaped without contracting the disease, you can imagine my surprise when the babe was brought back completely covered with small-pox eruption from the crown of its head to the soles of its feet, both inclusive, so that there was not a spot on the child's body where you could rest the end of your finger without touching a pock. For two days the child's mouth was so bad that it nursed with difficulty, but aside from this, as a general thing, it nursed well and bore its affliction with remarkable ease and quietude, and passed through the severe ordeal of the suppurative stage of small-pox, which so severely taxes the strength and vitality of the adult, making a good and rapid recovery, and with only a few marks of any extent. The only medicine I gave the child was the *sulphite of soda* in the syrup of glycyrr., and a little sweet spirits of nitre for the fever. Now, I believe the cases which terminate favorably in such young infants—from six to eight weeks old—are comparatively rare; and whether this child owes its life to the soda or an unusual amount of vitality is, of course, not for me to say.

Case III. J. N., farmer, German, *æt.* about 30, was taken very sick with the measles, March 13, 1864, and sent for me the following day upon the appearance of the eruption, and upon seeing him I found that what the friends and neighbors had looked upon as measles was, in reality, *confluent small-pox*, and of no moderate pretensions. This man was unfortunate in securing for a nurse a man who did not believe in medicine for small-pox, and who presumed to take the treatment into his own hands, much to the detriment of the patient; for, upon my discovering the fact, and causing a return to my remedy, with

increased dose, he again became more comfortable. This man was delirious and entirely blind for *five days*, and could take no nourishment aside from a little gruel or broth, but he made a good recovery, carrying, however, the lasting evidence of his "change of doctors," as he believes. Three of his children, aged *one*, *three*, and *five* years, who proved insusceptible to vaccination, had varioloid or variola, as you please. They took the soda as a prophylactic, and were not confined to the bed at all, paying but little heed to the disease.

During this spring (1864) I treated, in all, twelve or thirteen cases of variola and varioloid, using this remedy, and all with favorable results; gaining quite a reputation as a "small-pox doctor," although I did not pretend to make a *specialty* of it; and my confidence in the sulphite of soda, as a valuable remedy in such cases, increased with each additional test.

Dr. Terry also used these preparations in the treatment of typhoid fever, erysipelas, and other like diseases, during my association with him, and speaks highly of them as remedial agents. One case of hospital gangrene, attended by him, is not without interest:

A soldier was wounded in the battle of Chickamauga, with a minie ball, just below the instep of the left foot, the ball passing transversely across the foot. He was treated in the hospital at Chattanooga until the following March, when he was discharged—up to which time we have no history of the case. When discharged, the surgeon in charge not only despaired of saving the foot, but also his life, and advised and urged immediate amputation. His father, however, determined to bring him home first, and, upon their arrival, immediately sent for Dr. Terry, to amputate the foot. I will give the Doctor's own language: "On my first visit, I found the patient emaciated almost to a skeleton; skin dry and husky; pulse 140 per minute; foot and leg intensely swollen and œdematous, with a large gangrenous ulcer involving the whole dorsum of the foot, with thick, indurated, and shelving edges, the gangrene dissolving the tissues beneath, and emitting a most intolerable odor. The treatment for some time had been flaxseed poultice to the ulcer,

with quinine, iron, and whiskey internally. I prevailed upon the parents to defer the operation a few days, while I made an effort to save the limb, and also to satisfy myself whether the boy had recuperative power sufficient to react and survive the operation. I cauterized the gangrenous parts with *potassa fusa*, continued the poultice, and also sprinkled the surface with the *sulphite of lime;* continued the general treatment, adding *sulphite of soda* internally. In three days the offensive odor was entirely gone. The eschar separated kindly, and gangrene reappeared, subsequently, but once, yielding readily to the caustic, leaving a healthy granulating surface." This patient made a good recovery, the wound keeping pace with the improvement of his general health, until, in six weeks, it was entirely healed, and the young man walked on both his feet again, instead of one. This much for conservative surgery.

I could add many other cases, in which I have seen good result from the administration of the sulphites, but time will not permit at present, and I have already occupied your attention quite long enough. A case of typhoid fever now under treatment, has, I think, been greatly benefited by the soda—the delirium passing off, mind becoming clear, fever abating, and tongue becoming moist and soft under its influence. But the results of this case are still in the future. The patient had taken the emulsion of turpentine with beneficial results, but the delirium continued until the administration of the preparation of soda, but this *may* have been incidental.

As to the treatment of variola, if Dr. Tanner's ideas are correct, with regard to all drugs heretofore used, and the sulphite of soda will prove an exception, then it is indeed a blessing at hand. He says: "The less drugs are used in the treatment of small-pox, the better; since they will neither shorten the disease, nor exert any favorable influence upon the eruption." He also pronounces the *Sarracenia purpurea*, or pitcher plant, a failure. From my experience, I feel confident that the *sulphite of soda* not only shortened the disease, but also exerted a *favorable influence on the eruption*, many of the vesicles aborting, or stopping short of the suppurative stage.

But I must refrain from further comment at present, however tempting it be, which, together with the probable effect of these articles, I reserve for consideration at some future time.

ARTICLE XVI.

REVIEW OF DR. McELROY'S HYPOTHESIS OF THE PATHOLOGY OF TYPHOID FEVER.

By J. E. HENDRICKS, M.D., Des Moines, Iowa.

After describing the characteristic symptoms of typhoid fever, the writer says: "Now what is the meaning of this series of phenomena? * * * Manifestly, the soft tissues of the body are burning up. And why? Because the fever poison has rendered more or less of them unsuitable for further use of the body."

This assertion that the fever poison has rendered more or less of the soft tissues unsuitable for the use of the body, is, I think, an *entirely gratuitous assertion*, not supported by a single fact of observation or analogy. The hypothesis is not only not supported by observed facts or analogy, but it is directly opposed to *known* facts. As I take no exceptions to the treatment advocated, it being, in the main, the *expectant*, which I believe most experienced physicians adopt, I will confine these remarks to the above hypothesis.

Without expressing any opinion as to the nature of the *vital force*, or, as it is more properly called, the "*directing energy*," I may safely say that physiologists now agree that all the forces manifested by the animal system are ultimately derived from without, and are introduced as food. This food consists of molecules of matter in a state of unstable equilibrium, and force is only manifested when these molecules descend to a state of more stable equilibrium; and when the molecules thus descend to a more stable state, force, in some form, is *always* produced.

All the tissues, therefore, that are susceptible of oxidation are, until chemically decomposed, in a state of *potential* force, and cannot (unless cut off from a supply of oxygen) become "effete" or prejudicial to the system. That the soft tissues are not cut off from a supply of oxygen during fever, is manifest from the fact that they are being "burned up," producing, instead of muscular power, its equivalent, in the form of local *heat*, thereby clearly indicating that the tissue before its oxidation was *not* "effete," but in its normal state of *potential* force. In view of these facts (which are not mere hypotheses, but rest upon the firm basis of the conservation of forces), what is "effete tissue," which needs to be burned up that it may be eliminated? Manifestly, an *imaginary* source of disturbance, the existence of which is incompatible with the known facts.

But, it may be asked, if I deny that "effete" tissue is the proximate cause of fever, what *is* the cause?

As it is admitted that all the forces manifested by the system are ultimately derived from without, we may, for the sake of illustration, compare the system to a very complicated machine, the steam engine for instance. In the absence of any positive knowledge of the cause of fever, I will assume, as is generally believed, that the fever poison is some foreign body that is introduced and interferes with the harmonious action of the system; as if, instead of lubricating some of the moving parts of a steam engine with oil, some rough, adhesive substance should be applied; obviously, a portion of the working force of the engine would be diverted from its ordinary application, to overcome this adhesion or the friction resulting therefrom, and would manifest itself in the form of *heat*. So in the case of the fever patient; a poison has been introduced which interferes with the harmonious action of the different parts of the system; the assimilation of food is arrested; the force resulting from the oxidation of the tissues is directed from its usual manifestation as muscular power, and appears merely as an equivalent in the form of *heat*. This condition continues until the system eliminates the poison or becomes able to perform its wonted functions, notwithstanding its presence. There is,

therefore, no necessity for assuming the presence of "effete" tissue, even if its existence were possible.

It may not be improper to add to the foregoing remarks, the following quotation from Dr. Carpenter:

"To sum up: The life of man or of any of the higher animals, essentially consists in the manifestation of forces of various kinds, of which the organism is the instrument; and these forces are developed by the retrograde metamorphosis of the organic compounds generated by the instrumentality of the plant, whereby they ultimately return to the simple binary forms (water, carbonic acid, and ammonia), which serve as the essential food of vegetables. Of these organic compounds, one portion (*a*) is converted into the substance of the living body by a constructive force which (in so far as it is not supplied by the direct agency of external heat) is developed by the retrograde metamorphosis of another portion (*b*) of the food. And whilst the ultimate descent of the first-named portion (*a*) to the simple condition from which it was originally drawn becomes one source of the peculiarly animal powers—the *psychical* and *motor*—exerted by the organism, another source of these may be found in a like metamorphosis of a further portion (*c*) of the food which has never been converted into living tissue."

ARTICLE XVII.

CASE OF BILIARY CALCULI.

BY R. DUNLAP, M.D., Waukesha, Wis.

Was called, on Saturday, March 14, to see Mr. John H. Foster, in consultation with Dr. Steele. Found he had been taken sick on Wednesday, the 11th, with bilious colic; had been in great pain through the bowels, attended with vomiting large quantities of bile for three days, without any passage from the bowels. The pain had left, but there was vomiting of a dark brown color every time any fluid was taken, but in

small quantities and without any great effort. There had not been any cramping or straining. Pulse 97, and no fever or inflammation; tongue of a thin brown color; skin cool and a little moist; some soreness and tenderness over the region of the stomach.

Dr. Steele first gave an emetic, followed by submur. hyd. and opii in small doses, to the amount of about 20 grs., and applied counter-irritants to the abdomen; had used injections freely, with operations from the bowels but twice. The first injection came away as it was given, and in about an hour he had a large passage (on Wednesday) of dark, hard fæces, looking like small worms. The other injection came away as given. I recommended to follow up the submur. hyd., in about 20 gr. doses every 4 hours, and applied croton oil to the stomach.

Sunday, added large doses of opium to the submur. hyd. Monday, Dr. Garner, of Milwaukee, was called, and advised submur. hyd. 20 grs., strychnine $\frac{1}{16}$ gr., prussic acid, and cyanide of potassa. Tuesday, used a warm bath about the middle of the day, and immediately after gave 25 grs. submur. hyd. and 2 drops croton oil. About 7 o'clock he had a passage from the bowels, which continued moderately during the night and fore part of the next day, accompanied with some bile. Vomiting had continued the greater part of the time, but not so severe, in smaller quantities, and not so frequently. I forgot to say that on Saturday, the first day I was called, I advised small pieces of ice to be held in the mouth, which was continued the whole time, with a very pleasant feeling, if not with any success. The pulse had remained, all the time, from 80 to 90.

Wednesday, he felt exceedingly well; but very little vomiting; skin natural; pulse 110 and soft. About 7 o'clock in the evening, a sudden change took place. He began to sink; a cold, clammy sweat came on; his pulse was almost imperceptible; great distress for breath; and restlessness. Brandy was freely given, but did no good. Thursday morning, I was sent for. Finding him in the above state, I gave brandy and quinine, which was used all day, accompanied with rubbing with stimulating washes and using all the external applications we

could think of, but all to no effect. He breathed his last at 9½ o'clock, as if he was going asleep.

Post Mortem.—Found the bowels empty, excepting a little fluid; saw where the stricture had been; some little mortification; the liver somewhat enlarged; and in the gall-bladder were 142 stones, from the size of a hickory nut to that of a small pea, all weighing one ounce.

Mr. Foster came to see me last winter, concerning his back, complaining of a fluttering just above the small of the back. He had no pain, but that disagreeable fluttering. He had a rupture for many years, but it had healed up, and he had not worn a truss for three years. This fluttering troubled him during his sickness.

Foreign Correspondence.

PARIS, *March 3d, 1868.*

DEAR DOCTOR:—Since my last visit to this great medical centre, the old masters have mostly disappeared. In surgery, Malgaigne, Velpeau, Civiale, and Jobert (de Lamballe) are dead; Nélaton, full of honors and riches, has retired from the hospitals and the school, and men comparatively new are occupying their places. In medicine, Trousseau, justly regarded as the first among his equals in France and, perhaps, in the world, at the end of a long and useful life, the practical results of which are given to the profession in his last and best work, the *Clinique Medicale*, also sleeps the sleep that knows no waking. Death has also taken away many others of lesser note, so that at the Academy of Medicine, the Society of Surgery, and in the hospitals, the changes are very apparent.

In the Academy, the subject of tuberculosis which has, during the last year, occupied so much of its time, was brought up again last week by the presentation of a letter from Professor Lebert (of Breslau).

It is very generally admitted, I believe, that inoculation with

tuberculous matter is followed by the development of morbid elements having a strong resemblance to, if not identical with, those of tubercle; but there is quite a difference in the views entertained by pathologists as to the *modus operandi* of the inoculated matter. Villemin and others who have experimented upon animals, think that the disease is a specific one, as much so as small-pox or syphilis, and that the introduction into the system of a portion of tuberculous matter, however small, by a process of incubation, results in the development of tubercular masses. On the other side, the specific nature of the disease is denied, and the mode of production of the morbid matter questioned.

Prof. Chauffard, at previous meetings of the Academy, had attempted to show that the same results follow from inoculation with any morbid non-specific matter, and that, consequently, there is no incubation, no such relation between the ultimate disease and the inoculated matter as exists, for instance, between the syphilitic disease and the syphilitic virus. The discussion has raised the old question, which was supposed to be settled, as to the inflammatory nature of tuberculosis, and the question is asked whether this introduction of morbid matter into the blood does not set up a kind of inflammatory action, resulting in an unhealthy exudation. Such seems to be the opinion of Lebert.

In connection with this question, the histology of tubercle has again become the subject of discussion. The question as to what constitutes tubercle, whether it is simply granular matter or whether it is more or less cellular, whether there is any definiteness of size and form or whether these qualities are incidental, determined by location and clinical history; whether there are two varieties, or whether the so-called crude yellow tubercle is only the product of a chronic pneumonia; these are so many questions that seem to be, in the minds of many of the best thinkers, yet unsolved. So far as the treatment of tuberculosis is concerned, there seems to be but little, even in the way of suggestion, that is new.

M. Moutard Martin presented to the Academy of Medicine

a memoir upon the value of arsenic in the treatment of *phthisis pulmonalis*. The conclusions of the memoir are as follows:

1st. The arsenical medication has a very positive effect upon the tubercular disease.

2d. Its action is more efficacious in those cases where the progress is slow, with but little constitutional disturbance.

3d. Acute phthisis is in no respect modified by the arsenical treatment.

4th. In a large number of cases, even in advanced stages with hectic fever, the general condition of the patients is, for a time at least, favorably affected by the treatment.

5th. The change in the local lesions is accomplished slowly.

6th. A certain number of cures ought to be attributed to the arsenical medication, the success would be more certain if the patients did not too soon consider themselves out of danger.

7th. To be efficacious, the treatment must be continued a long time.

8th. The drug should be administered in doses extremely minute.

9th. The doses should not be more than $\frac{1}{5}$ of a grain daily.

10th. Contrary to the opinion of some authorities, arsenic is better tolerated in the early than in the advanced stage of the disease.

11th. When not more than $\frac{1}{7}$ to $\frac{1}{5}$ of a grain is given daily, the tolerance is indefinite.

12th. The most evident action of arsenic is manifested in the reëstablishment of the general strength, the improvement in the local pulmonary lesion being secondary. Nevertheless, certain facts go to show that arsenic produces a direct effect upon the function of respiration, and suggests that it may act directly upon the pulmonary tissue and upon the tubercular deposits.

I had the pleasure of again seeing Fauvel, who devotes himself entirely to the diseases of the throat and nares. I saw him operate in several cases of laryngeal polypus. He has a good deal of dexterity, and is thoroughly enthusiastic in his specialty. He is about publishing a work on the diseases of

the throat and larynx, illustrated with drawings of cases occurring in his practice. Many of these drawings I had the pleasure of seeing. Moura Bourouillou, Mandl, and Fournié are also engaged in the treatment of affections of this portion of the respiratory apparatus.

Prof. Tourdes, of Strasbourg, and Hepp, *pharmacien en chef* of the civil hospitals of Strasbourg, have been conducting a series of experiments with a new anæsthetic, the bichloride of methyline. The conclusions to which they arrive are, that its action is very much like that of chloroform, probably in no respect better or safer.

So far as I can learn, the sanitary condition of Europe is good. I hear of no epidemics and no tendencies to any. The hospitals of Paris remain as they have been. The demolitions for the new *Hotel Dieu* are going on, but it must be a long time before the structure will be completed. Three years ago, the Emperor expressed the hope that this work of mercy would be achieved before the completion of the great temple of pleasure on the Boulevard, but the Grand Opera House is nearly ready and will soon be filled with music and beauty, while years must elapse before this structure, so appropriately named, will be ready to open its doors to the suffering poor who so much need the shelter and aid it is destined to furnish. H. A. J.

London, *Feb. 28, 1868.*

To the student of orthopædic surgery, London offers a large field for observation. The number of cases of deformity existing, and constantly occurring in a city of its size, has stimulated the surgeon to more thoroughly investigate the means of preventing and correcting them. The result is, that London now has three hospitals devoted to this specialty which are open for clinical instruction three days in the week. The material thus collected for study has greatly advanced the pathology and, consequently, the rational and successful treatment of joint diseases and all deformities. The control of skilful work-

men, willing to construct whatever the surgeon desires, renders the mechanical treatment a much easier task than is experienced in Chicago or our eastern cities.

"The Royal Orthopædic Hospital" contains the largest number of cases of talipes and spinal curvatures. Its statistics report the treatment of over two thousand cases of deformities of the feet. The division of tendons is not as frequently resorted to as formerly, although by no means abandoned. Myotomy is frequently performed when the location will permit; as muscles make better union and regain their function more perfectly than tendons. The foot is seldom retained in the shoe by means of bandages, but, enclosed in an elastic stocking, it is secured by means of bands passing over the points where pressure acts to the greatest mechanical advantage. The elastic stocking prevents swelling, which would occur were the bands alone used. By this mode, the force is more localized and not diffused over the foot, as is the case when the bandage is used. In the first part of the process, but little tension is made, allowing union to begin in the divided tendons or muscles; in the latter, all the force that the patient can tolerate without producing pain.

The compound forms of talipes are treated by removing one element of the deformity at a time. For instance, (in talipes) equion-varus, the varus is first corrected and the case reduced to a simple talipes-equinus, which is overcome by subsequent treatment. The cure is more rapid and more perfect when this course is pursued, than when the old method is followed. The tendency to *toe in*, so frequently met with after the plantar surface is restored, is also entirely obviated.

In Potts' disease, or the backward curvature of the spine, the relief of the inflamed vertebræ from pressure and general tonic treatment, is the course pursued.

Recent cases of lateral curvature are corrected without great difficulty; but those of long standing, especially when accompanied with rotation of the vertebræ, are among the most difficult deformities to remove. Exercise of special spinal muscles, accompanied with moderate lateral pressure, together with such

constitutional treatment as each particular case may require, are the means resorted to.

The surgery of deformities is, in London, receiving the attention which it merits, and those cases which a few years ago fell into the hands of "*quacks*" and "*wonderful liniment men*," are now receiving skilful and efficient treatment.

J. S. SHERMAN.

PARIS, *March 22d, 1868.*

The medical and surgical departments of Paris have, within a few years, undergone great changes. Within the last four years many of the most prominent men of the medical schools have died. The death of such as Velpeau, Trousseau, and Malgaigne is not yet forgotten in our own country, much less in Paris. Ricord and Nélaton have both passed the age of hospital service, and no longer appear at the clinic.

The bad ventilation of the hospitals and the consequent diseases produced by the impure air, are the most objectionable features in Paris. These buildings were erected years ago, when the importance of ventilation was not known. The government has refused to build sufficient new ones, and this necessitates the use of the old ones. Some improvements are, however, being made. The "Hotel Dieu" is being rebuilt with all the modern improvements in ventilation, and it is the hope of the medical faculty that a similar course will be taken with the remainder. The large number of patients brought to the hospitals exceeds their accommodations, and leads to disastrous overcrowding in their wards.

The use of sutures after amputations is almost abandoned, the cut surfaces being held in apposition by a simple compress. When the circular operation is performed, the compress is omitted, the limb being placed in a position to favor drainage, without any dressing whatever. The irritation of stitches is thus prevented, and better results claimed than by the ordinary method. Prof. Syme, of Edinburgh, frequently omits the ligation of arteries, hemorrhage being controlled by torsion, in vessels both large and small.

There is no more interesting clinic here than that of M. Mallez, who gives his attention specially to diseases of the genito-urinary organs. Gonorrhœa and gleet, the latter of which is here known as "*la goutte militaire*," or "military drop," on account of its frequent occurrence in the army, is treated by insufflations of various remedies. The remedies are thus carried directly to the diseased part. It is painless in its application, and can be applied to portions of the urethra which cannot be reached by injections. For the purpose of making these insufflations, he has an instrument consisting of a small flexible tube, one end of which terminates in a hollow rubber ball. This tube, near its attachment, has a small hopper connecting with its interior, into which the powder to be blown into the urethra is placed. In using it, a silver tube is first introduced into the urethra, large enough to easily admit the elastic one; the space between them furnishes a return for air. By compressing the rubber ball, the powder is carried directly to the membrane, and by gradually withdrawing the tube, the whole surface of the urethra may be covered with the remedy. All substances thus used should be finely powdered. Those most in use are bismuth subnit., acid tannic, alum, potas. permanganate, any others may, however, be used, according to the indications in the case. The usual duration of treatment is from eight to twelve days; many cases yield in less time; old and obstinate cases of chronic urethritis, which have lasted for years, have been cured by this mode of treatment when all others have failed. Applications to the bladder may be made by means of the same instrument.

M. Mallez treats paralysis of the bladder by exercise of its muscular coat. To accomplish this, he first injects it with warm water, sufficient to well distend it. This produces a slight contraction, and expulsion of the fluid. Water of a lower temperature is then injected, which causes a still greater contraction. This is repeated several times, the temperature being lowered in each injection, until the limit of contraction is reached. The excitor of muscular action being cold and the principle the same that we apply in paralysis of other parts of the body.

Strictures of the urethra he divides by means of the galvanic cautery, and claims that wounds when produced by this agent do not contract when healing; hence, there is less liability to a return of the stricture than when the knife is used. Sufficient time has not elapsed to absolutely determine the truth of this theory, yet the numerous cases operated upon have progressed most favorably. Many of the most obstinate cases are found in his specialty, and he has certainly developed much in their pathology and successful treatment.

J. S. SHERMAN.

Proceedings of Societies.

ANNUAL MEETING OF THE CHICAGO MEDICAL SOCIETY, APRIL 3D, 1868.

Regular Annual Meeting of the Chicago Medical Society, Vice-President Dr. Reed in the chair. Dr. Loverin was chosen Secretary, *pro tem.*

Dr. Norman Bridge was proposed for membership. Referred to the Board of Censors.

On motion, the Society proceeded to the election of officers for the ensuing year. The Chair appointed as tellers, Drs. Ray and Macdonald.

On motion of Dr. Paoli, an informal ballot was taken for President, resulting as follows, *viz.:* whole number of votes cast 20, of which Dr. Marguerat received 9, Dr. Hatch 6, scattering 5. The regular vote was then taken, and Dr. Marguerat receiving a majority, was, on motion, declared unanimously elected President for the coming year.

The Society then proceeded to the election of Vice-President, resulting as follows: whole number of votes cast 21, of which Dr. Bogue received 16, scattering 5. On motion, Dr. Bogue was declared unanimously elected.

For Secretary and Treasurer, the number of votes cast was

21, of which Dr. Hutchinson received 9, Dr. Macdonald 12. On motion of Dr. Wickersham, Dr. Macdonald was declared unanimously elected.

The Chair appointed Drs. Davis and Wickersham to conduct the President and Vice-President to their chairs.

Dr. Marguerat thanked the Society for the honor conferred upon him, by electing him President, and would endeavor to discharge his duties to the best of his ability. Remarks were also made by Dr. Bogue to the same effect.

The newly elected President said he desired one week's consideration before naming the standing committees.

On motion of Dr. Wickersham, a vote of thanks was tendered to the retiring officers, for the very able manner in which they had discharged their duties.

On motion of Dr. Davis, the Society proceeded to the election of delegates to the American Medical Association, to be held in Washington, D.C., on the first Tuesday in May. The following named gentlemen were duly elected: Drs. Reed, Hamill, Fisher, Ross, Paoli, Holmes, and Rush.

On motion, the Society proceeded to elect delegates to the Illinois State Medical Society, to be held in Quincy, on the third Tuesday in May. The following named gentlemen were duly elected: Drs. Hildreth, Holmes, Hatch, Fitch, Bevan, Bogue, Paoli, Quales, Guerin, Hutchinson, Reed, Miller, Marguerat, and Earle.

Dr. Lyman, the retiring Secretary, presented a report, showing the expenditures for the past year ($59.46), and the amount of cash on hand ($8.93). On motion of Dr. Davis, the report was accepted and ordered to be placed on file.

On motion of Dr. Davis, the delegates to the Illinois State Medical Society were requested to invite the said Society to hold its annual meeting for 1869 in Chicago.

A motion was made and carried, that the Society postpone the discussion on diphtheria until the next meeting.

Dr. Wanzer exhibited a pathological specimen, stated by him to be an "exudation of the bowels in the form of shreds." He remarked that the patient had suffered for some years with

syphilitic contamination, inclined to constipation, her bowels being neither tympanitic nor tender. Treated the patient for secondary syphilis, administering proto-iodide of mercury and iodide of potassium in proper doses. Dr. W. desired the opinion of the Society as to the character of the specimen presented.

Dr. Davis said that he was not prepared to give his opinion until the specimen had undergone a microscopic examination.

Dr. Paoli suggested that, probably, Dr. Lyman would favor the Society by a microscopic examination and report on the case at the next meeting.

Dr. Wickersham moved the following resolution, which was carried:

Resolved, That the delegates from this Society to the American Medical Association and to the Illinois State Medical Society be instructed to vote for no one for office at the gift of said Societies, unless the candidate is a member of a local medical society, providing there is such an organization in the county where the candidate resides.

On motion, the Society adjourned.

CHICAGO, *April 10, 1868.*

The Regular Meeting of the Chicago Medical Society was called to order by the President, Dr. Marguerat.

The Secretary read the proceedings of the Annual Meeting of the Society, held on the 3d inst., which proceedings were duly approved.

Dr. Davis then recommended that the Society proceed to ballot for the election of Dr. Norman Bridge as a member of the Society, which was duly carried. Number of votes cast, 8, all being for the admission of Dr. Bridge.

The President then appointed the following standing committees:

On Ethics—Drs. Davis, Paoli, and Ross.

Censors—Drs. Wickersham, Reid, and Loverin.

Sanitary Committee—Drs. Hatch, Trimble, and Seeley.

Under the call for pathological specimens, Dr. Bogue presented a nasal polypus, extracted from the nose of a child. Its

attachment was near the posterior opening of the nostril, and had become so pendulous as to touch the tongue and somewhat obstruct the breathing. It was more firm than the ordinary soft nasal polypi.

Dr. Davis stated that he extracted a very similar polypus from a boy of 10 years, some days since, although not quite so pendulous in form as the specimen presented. This polypus being also extracted through the posterior nares.

Dr. Loverin remarked, that it had been recommended that a small portion of the inferior turbinated bone be removed along with the polypi, as it prevented their return.

Dr. Davis spoke of removing a nasal polypus from the anterior portion of the inferior turbinated bones, and of its cure by using a solution of liq. zinci chloridi gtt. iv, aqua ℥j, either injected or well snuffed up the nose. He also recommended a snuff consisting of:

℞. Pulv. Bloodroot,----------
" Opii,----------āā gr. xx
Acidi Tannici, ---------- ℥j.

M.

The subject for discussion, *viz.*, Diphtheria, was then taken up for consideration. The discussion was commenced by a written communication from Prof. DeLaskie Miller, read by the Secretary. The discussion that followed was participated in by Drs. Bogue, Davis, Paoli, Loverin, Hutchinson, and Marguerat; and though interesting and profitable, as a free interchange of views, it elicited no facts of importance not already before the profession.

MILITARY TRACT MEDICAL ASSOCIATION.

The Semi-Annual Meeting of the Military Tract Medical Association was held in Princeton, on Tuesday, Dec. 10, 1867, Dr. Hiram Nance, of Kewanee, in the chair.

The following new members were elected, on report of the Board of Censors: Drs. Kaull, E. Chamberlain, and Dunn, of Bureau Co.; and Prof. Hull, of Iowa Medical College. Dr.

Wm. O. Chamberlin, of Bureau Co., was elected an honorary member.

Dr. S. P. Breed, of Bureau Co., Chairman of Committee on Practical Medicine, read a very interesting report, which, by a vote of the Association, was requested for publication in the CHICAGO MEDICAL EXAMINER.

Dr. Holton, of Bureau Co., presented an interesting report on Materia Medica and Therapeutics, which, on motion, was received.

Dr. Holton offered the following resolution:

Resolved, That we, as members of the medical profession, refuse to consult with any physician who as a rule charges but one-half or two-thirds the regular fee, as agreed upon in our fee-bill

After discussion, it was laid upon the table by the casting vote of the President.

Dr. Reece, of Knox Co., presented a very interesting specimen of intestinal concretion, about three inches in length and one and one-third inches in diameter, and supposed to be cholesterine. Dr. R. was appointed a special committee of one, to report fully upon the subject at the next meeting of the Association.

Dr. Reece read an interesting paper on the treatment of fracture of the femur, both simple and compound, without the use of splints, depending upon the use of weights for both extension and counter-extension; also, on the importance and advantages of the silver suture in surgery.

The following Committees were then appointed:

Surgery—Drs. A. H. Thompson, Bureau Co.; Madison Reece, Knox Co.; Webster, Warren Co.

Practical Medicine—Drs. Holton, Bureau Co.; Boardman, Stark Co.; Breed, Bureau Co.; Brown, Henry Co.

Materia Medica and Therapeutics—Drs. Smiley, Henry Co.; Latimer, Bureau Co.; Woodward, Knox Co.

Obstetrics and Diseases of Women—Drs. McDill, of Henderson Co.; Phillips, of Knox Co.; Kaull and Crossley, of Bureau Co.

Drs. H. S. Hurd, of Knox Co., and S. P. Breed, of Bureau Co., were appointed special essayists for the next meeting of the Association.

Dr. A. H. Thompson, of Bureau Co., read a paper on organic and functional disease, taking the ground that there could be no functional disease in the strict sense of the term, as all derangements of function must depend on a corresponding derangement of the organism upon which the function depends. On motion, the paper was ordered published.

The Association then adjourned, to meet at Kewanee on the second Tuesday in May next.

A. H. Thompson, *Sec'y, pro tem.* HIRAM NANCE, *President.*

CHAMPAIGN COUNTY MEDICAL SOCIETY.

The Fourth Regular Session of the Association was held at the office of Dr. C. H. Mills, in Champaign City, on Wednesday, April 1st, 1868, and was called to order by the President.

The minutes of the last meeting were read and approved.

A very interesting paper was read, on the use of the speculum in the treatment of uterine diseases, which was discussed with spirit and profit.

The following officers have been elected for the ensuing year:

President—Dr. C. H. Mills.
Senior Vice-President—H. Somers.
Junior " " W. R. Earhart.
Treasurer—I. T. Pearman.
Secretary—S. H. Birney.
Censors—H. C. Howard, I. McHugh, M. S. Brown.
Delegates to Illinois State Medical Association—Drs. W. Earhart and S. H. Birney.

On motion, the Secretary was directed to prepare an account of the proceedings of the Association for publication, and send copies to the Chicago *Medical Journal* and Examiner.

On motion, the Society adjourned, to meet in Urbana the first Wednesday in June.

I am happy to state that the Society is in a very flourishing condition.

SAM'L H. BIRNEY, *Secretary.*

Selections.

ON THE CONVEYANCE OF ASIATIC CHOLERA FROM HINDOOSTAN, THROUGH CENTRAL ASIA AND PERSIA, TO RUSSIA AND ENGLAND, FROM 1817 TO 1831.

By JOHN C. PETERS, M. D., of New York.

Asiatic, or Hindoostanee cholera, has always originated in India or Hindoostan, and has been conveyed from thence repeatedly to almost all parts of the world. The cholera of 1817 originated at or near the mouth of the Ganges, followed up the course of that river to the northwest, towards its source in the Himalaya Mountains, then pursued the great trunk road of trade and traveled through the cities of Delhi and Lahore, to the Punjaub, or extreme northwestern province of Hindoostan; passed through the Himalaya Mountains along the line of the Cabul river to the city of Cabul; thence followed the course of the caravan trade between Russia and Asia, through the great cities of Central Asia and Independent Tartary, viz.: Balk, Bokhara, and Khiva, to the towns of Astrakhan and Orenburg, in European Russia.

Another great route of cholera was from Bombay, in 1821, to Muscat, at the foot of the Persian Gulf; thence up the Gulf to Bushire; from there through Central Persia to Ispahan and Teheran, and up the Caspian Sea till it reached Astrakhan, in Russia, near the mouth of the Volga, in 1823, when 216 cases, and 144 deaths occurred. The Russian Government established a most rigid quarantine against Astrakhan, and saved the rest of Europe. From Teheran, to Persia, near the foot of the Caspian Sea, it also followed the line of travel up between the Black and Caspian Seas, to Tabrez and Tiflis, in the Caucasus, and reached Astrakhan from this (third) direction. But the precautions of the Russian authorities again prevented this, and from 1823 to 1829, we find European medical writers speaking of cholera as an epidemic which had passed away, and expressing the hope that it would never return.

But in 1827, cholera received a fresh impulse in Northwestern Hindoostan, and was again carried by caravans from Lahore, in the Punjaub, through the Himalaya Mountains, by way of Attock and Peshawar, to Cabul, Balk, Bokhara, and Khiva, and reached Orenburg, in Russia, on the 29th of August, 1829.

About the same time, it was again carried from Bombay up the Persian Gulf, and again arrived at Teheran, in the northernmost part of Persia, in 1829, whence it was forwarded up the Caspian Sea to Astrakhan, by the 19th of July 1830.

Thus Astrakhan and Orenburg, in Russia, were the first towns in Europe ever attacked by cholera, and if it is asked why this should be, the answer is very easy.

Orenburg is situated on the Ural river, some distance above its mouth, by which it empties into the northern end of the Caspian Sea. The Ural river forms part of the boundary line between Russia and Asia, and Orenburg is built on both sides of this stream, with two separate bazaars—one European, the other Asiatic—each located on the side of the river belonging to their respective countries. The European bazaar has 180 shops; the Asiatic 492. In fact, Orenburg is the chief emporium of the Russian trade with Central Asia, large caravans arriving yearly from Bokhara and Khiva, with jewels, gold, silk, cotton, cashmere shawls, indigo, tea, and other goods, to the value of over £1,500,000. Russia sends back the same amount of iron, cutlery, and other manufactures. More than 3,000 camels are employed in the transport of cast iron articles alone, consisting mainly of pots, kettles, and water cans. Indeed, there is no house, and even no tent, in all Central Asia, where there is not some article of Russian manufacture. The most active trade and correspondence is also kept up between the two countries, for many wealthy Asiatic merchants make constant trips to the Russian Fair of Nishni Novgorod, and frequently travel on to Moscow and St. Petersburg. Orenburg is also the principal Russian military station for operations against Central Asia, for in 1829, the town had only 11,000 inhabitants, of which number 6,000 were soldiers, and in 1839, no less than 20,000 men and 10,000 camels, set out from this city on a campaign against Khiva. Hence we are not surprised to find that cholera first declared itself in the Russian garrison at Orenburg. It prevailed from the 26th of August, 1829, to the 20th of November, and about 1,000 persons had the disease, out of a population of 11,000, but several hundreds only succumbed. It was checked by the cold

weather, and by the middle of February, Russia was free of the disease.

Astrakhan is the great rival of Orenburg for the Asiatic trade. Its population is composed of Russians, Armenians, Cossacks, Tartars, Calmucks, Hindoos, and the Asiatic tribes. In fact, it consists of almost all nations of Europe, Asia, and of all creeds. It has mosques for the Mahommedans, temples for the Hindoos, as well as churches for the Christians. It has over 100 large manufacturing establishments, extensive salt works, and flourishing fisheries on the Volga and Caspian Sea. It is likewise one of the principal naval depots, not only for the Caspian and Aral Seas, but also for many lakes and rivers of Central Asia. Numerous sailing vessels and steamers are constructed and armed at Astrakhan for the lakes and rivers of Central Asia.

Cholera was introduced into Orenburg by merchants, travelers, caravans and soldiers, but it came to Astrakhan by sailing vessels, especially from the port of Bakon, on the southwest side of the Caspian Sea. In ten days, 1,290 persons were seized with cholera in Astrakhan, of whom 430 died.

From Astrakhan it extended up the river Volga the distance of 420 miles, in less than a month, and is supposed to have traveled nearly 1,500 miles from Persia, in three and a-half months, in order to reach Nishni Novgorod and Moscow.

It is said that many persons fled from Astrakhan, along the course of the Volga, and carried the disease with them; for in ten different towns along this stream, the first victims were navigators of the Volga, or others arriving from places where the disease already raged. Some distance above its mouth the Volga bends abruptly to the West, and approaches the river Don, which makes an equally marked elbow towards the East, and affords a facile and favorite place of trade for the inhabitants on the two rivers. Don Cossacks visited the Volga for the purpose of trade, contracted the disease, returned to the Don, where some of them died in September, and the cholera commenced to travel down the river Don towards its mouth in the Sea of Azof, and thus spread to the Black Sea, at the same time that it was ascending the Volga to Nishni Novgorod and Moscow. No less than 54,000 Don Cossacks contracted the disease in 1830, and 31,000 of them died. Other Cossacks were drafted in the Russian army, which was going to the Polish war, and with this army, cholera entered the southeast corner of Poland, and was carried northwest to Warsaw, from thence into Prussia. It is very significant that the little Mora-

vian town of Sarepta is situated on the great elbow of the Volga, in the very midst of the Don Cossack district, and has never contracted the cholera. The inhabitants are always very cleanly, and always institute a most rigid quarantine against cholera.

By the 27th of August, the pestilence reached Nishni Novgorod, high up on the Volga. Some say it came from Orenburg, in the East; others from Astrakhan, in the South. It probably arrived almost simultaneously from both places. The chief importance of Nishni Novgorod, is derived from the world-famed fair which is held there annually, and continues during the whole of July and August. It is visited by from 300,000 to 400,000 traders, and the value of the goods exhibited averages $50,000,000, of which more than one-tenth part comes from China, Persia, Central Asia, and India. In fact, Indian, Persian, and Chinese silks, teas, and furs, form some of the principal articles of Russian foreign trade, most of which reach it from Orenburg and Astrakhan. The vessels engaged in taking cargoes in and out are so numerous that the waters of the Oka and Volga rivers, at the confluence of which Nishni Novgorod is situated, are literally crowded and choked with the mass of shipping. The number of Asiatic visitors is also so great that Mahommedan mosques and Hindoo temples are placed in company with the Russian churches within the precincts of the fair.

By the 15th of September, 1830, the cholera reached Moscow, due west of Nishni Novgorod and Orenburg, 50,000 persons fled the city. But up to January, 1831, 9,000 of those who were left were attacked, and more than one-half of them died. Moscow is the seat of the principal Russian manufactories, of which not less than 484 are in active operation. It is also a great centre of internal commerce with Riga, on the Baltic.

From Moscow it was conveyed, early in May, 1831, to Riga, and it is distinctly stated that it was brought to the headwaters of the river Duna, at the mouth of which Riga is situated, and was carried up the stream to that city. Immense alarm arose, and on June 3d, no less than 60 vessels fled in haste from Riga, four of which were destined for England, especially for Sunderland, on the east coast. By October 26th, 1831, an official English report declared that 306 cases and 94 deaths had already occurred in Sunderland, and the first case of cholera in London occurred in the person of a man from Sunderland. From London it was carried to Dover, and over

to Calais and Paris, in France. From England it was carried to Ireland, and in the spring of 1832, vessels from Dublin and Cork, conveyed the disease over the Atlantic to Quebec, in the manner stated in the October number of your journal.

From Moscow it was also carried to St. Petersburg, on the 26th of June, 1831, and Drs. Russell and Barry, of the Indian service, who had been familiar with cholera in Hindoostan, were sent by the English Government to observe the disease. A triple cordon of troops were placed around St. Petersburg to keep out the cholera; but Drs. Russell and Barry stated that the first case occurred in a person who came down the river Neva, in a bark with goods from Moscow; the second in an individual who had been on board the bark upon its arrival; and the third in a soldier who had mounted guard on the boat to prevent any intercourse with the shore. From St. Petersburg it was carried down to Cronstadt, on the Baltic, and a new current of the disease was then let loose to visit Hamburg, Bremen, Denmark, Norway, Sweden, and England.

It is well to add that Sunderland, which is only 20 miles from Newcastle, had over 500 vessels engaged in the coal trade, with ports in the Baltic, in 1831; that Riga has the largest commerce of any other port in Russia, except St. Petersburg, and that Drs. Russell and Barry also state that the disease was propagated in St. Petersburg, immediately upon the arrival of several thousand passengers and boatmen, who had come from infected places in the interior of Russia, or had been exposed to infection on the passage on board these vessels.

ON MIXED TYPES OF FEVER; IN RELATION TO THE QUESTION OF THE IDENTITY OR NON-IDENTITY OF THE TYPHUS AND TYPHOID POISONS.

By Dr. HENRY KENNEDY, A.B., Dublin.

[The question of the identity or dissimilarity of typhus and typhoid fevers seems, in England, to be quite decided in favor of the latter. Turn to any work lately published on the subject, or to the doctrines taught at the London hospitals, as shown in the published clinical lectures, and this will forcibly appear. Dr. Kennedy, however, believes the two forms of fever to be identical, both owing their origin to the same poison. He observes that the work of Huss, on this subject, has always

been utterly ignored in this country. He saw fevers on a larger scale than any British physician.]

Surely, in such a widespread disease as fever, no one is justified in asserting that what they have seen is what must have been seen by others. We know that even in the type of fever familiar to us as typhus, very great differences exist, and may be constantly seen when the disease attacks several members of the same family. In one, the head symptoms are all in the ascendant; in a second, the chest will be the part attacked; whilst in a third, it will be the stomach, in the form known as gastric fever. Or, again, as regards the spots, the husband will present them and the wife not, or the parents will have them and the children not; or it may be the converse of this. In a family named Bright, of whom eight were in the hospital at the same time, and who were sent in by Dr. Carte, of the Royal Hospital, the children were all spotted, whilst the mother had none, though she had a very severe attack of fever. Again, in three sisters, all adults, who were recently in hospital, only one had the regular spots of the disease; in the other two anything of rash was most indistinct; one of these latter died. Further still, in the great epidemic of 1847–48, the fever was what is known, and had been described previously, as the relapsing fever; that is, it was made up of two parts. There was a sharp attack of fever running on for five or seven days; then a lull of one, two, or three days; and again an onset of fever, usually much severer than the first, and, in very many cases, attended by spots. No one, I think, could have any doubt but that it was one and the same poison that caused the two attacks; and yet, in all the recent and standard works on fever, the relapsing type is described as if it were a totally different fever from typhus, and caused by a different poison. I cannot give in may adhesion to this opinion, for I have as strong a conviction as the nature of the subject admits that the poison of typhus generates not only the type of fever known as relapsing, but other types, such as nervous, gastric, cerebral, etc., as also fever, both without and with spots, and presenting all the variety which they are capable of exhibiting; and if this view of the typhus poison be not held, insuperable difficulties, as it appears to me, must arise when we come to consider analogous diseases to fever, as, for instance, scarlatina. Here, every one must have seen the great variety—I might, also, say contrasts which this disease often presents in the same family and at the same time. Yet no one ever thought of setting down these differences to different poisons; and why it should be necessary

as regards fever it is not easy to understand. I must leave this point to others to settle.

From the tenor of these remarks, it will be understood what are the views I hold on the question more immediately under discussion. I believe that the typhus poison is capable of engendering the type of fever known as typhoid or enteric, and that this particular type must be due to some other cause, rather than a specific poison. On the other hand, I hold that the two types can, in the great majority of instances, be distinguished, the one from the other. When I brought the subject first before the Royal Medico-Chirurgical Society of London, in 1860, one of my arguments consisted in the detail of a few cases which were directly opposed to the views of the London physicians. In a later paper, published in the *Dublin Quarterly Journal*, a still larger number of cases were given, and I cannot, I believe, do better now than by giving the briefest sketch of some which have come under my notice within the last two years. But, in truth, I may say the difficulty now consists in selecting the cases, they have become so numerous. So I shall take such as bear most directly on the disputed point.

Case I. McKeown, farmer, aged 17, having a fine skin, passed through a very severe attack of enteric fever. Every symptom was present, and, during its progress, the brain was much engaged, and the tongue and lips covered with sordes. He made a good though slow recovery.

Case II. His brother, aged 12, from same room, was admitted under a severe attack of typhus. He had the well-marked and copious rash of the disease, and his face was quite characteristic. He had a sharp attack of diarrhœa, calling for special treatment. My friend Dr. Hudson, was kind enough to come and confirm my diagnosis of this case. It is but right to state that there was an interval of a week between the admission of these two brothers.

These two cases have been given as affording an example of the two types of fever, each well marked, coming from the same room. Others, I know, have met similar examples, and Dr. Croly, of Harcourt Street, has informed me of a very striking one.*

Case III. McCauley, aged 18, fine skin, was handed over to my care by my friend Dr. Moore. The patient labored under fever, and had the spots of the enteric type very well marked

* After the reading of the paper, Dr. Croly detailed three cases of fever which occurred in the one room. The first was a case of enteric fever, the second a case of typhus, whilst the third was a mixture of the two types.

on abdomen and sides of the thorax, but there was no other sign whatever of this kind of fever. His illness ran on for many days, the chest becoming engaged, and when he left the hospital there were signs about him as if phthisis might supervene.

Cases 4 and 5 were of a similar character to the one just given—that is, with fever, the spots were those of the enteric type, but no other symptom of that kind of fever. As they were published, however, in the *Lancet* for December, 1864, I shall say nothing more of them here.

Case VI. Podesta, an Italian, 14 years of age, and of a very fine skin, admitted into hospital in September, 1865. In the course of his fever he presented a very good example of the spots said to mark enteric fever. They were few in number, and appeared on the sides of the chest and abdomen. Neither in this case was there any other sign whatever of the enteric type of the disease.

Case VII. Develin, a young man of 17, admitted into hospital during the present month, April, 1866. He had fever, but not of a severe kind, marked by the usual symptoms, and the tongue red and furred. When he was now six days ill the spots of enteric fever appeared on the chest and abdomen, and in an unusually well-marked form. On the second day of their appearance this patient was seen by the Drs. Martin, from Berlin, who happened to be visiting the hospital. On the third day, however, the number of spots had greatly increased, and become more those of typhus, and, finally, the case, beginning with the spots of enteric fever, became one of irregular typhus.

Case VIII. Keegan, a man of 27, admitted March, 1865. He was laboring under a heavy spotted fever. Some of the spots were large and dark, some were unusually well defined and red, and disappeared on pressure. The case, however, was one of regular typhus, and the man made a good recovery.

Case IX. Murphy, girl of 19, whilst passing through a severe attack of fever, with typhus spots, got a very sharp attack of diarrhœa, attended by tympany, and pain on pressing the ilio-cœcal region. Nothing checked this diarrhœa till special treatment was adopted.

Case X. A dumb girl, aged 24, sent into hospital from the South Union. She had bad fever, being all covered with a copious mealy rash, whilst the tongue, face, and eyes were those which mark typhus. In the progress of the attack she has got severe diarrhœa, attended by tympany, and distinct pain when pressure was made on the ilio-cœcal region, and only

here. This complication required specific treatment, and she got steadily but slowly well.

Case XI. Dixon, a man of 25, of a very fine skin, and thin, admitted into the Cork Street Hospital, laboring under fever, and with a copious rash of typhus spots over him. His general aspect that of the same type of fever. As the disease went on he got severe diarrhœa, the discharges being a light yellow color, and attended by distinct pain in right iliac region, and tympany. This man also required specific treatment, and the attack was one of unusual severity, marked by great distress and restlessness. His recovery, too, was much prolonged by the occurrence of several abscesses.

Case XII. In February, 1866, Kelly, a man of 19, was admitted into hospital. He was evidently very ill; but the symptoms of typhus and enteric fever were so mixed up that I was quite unable to say to which type of the disease the case ought to be referred. He had a copious rash over the body, and his expression was that of a man in typhus. But he had, also, slight though marked tympany, distinct pain on pressure over the ilio-cœcal region, and a very severe diarrhœa, the discharges being of a light yellow color. He made a very slow recovery. *This man's sister was in hospital at the same time. She had typhus.*

Case XIII. Woods, a man of 20, came in with a kind of spurious fever on him. He then went out for some days, but returned in a week with every sign of enteric fever on him except the rash. He had, however, spots on him, which to my surprise turned out to be variola in the discrete form. Whilst still in bed from this, he seemed one day to grow suddenly worse, and then typhus in a very severe form declared itself. During all this time he had sharp diarrhœa, and the discharges were those which I believe to be most characteristic of enteric fever, being of a light yellow color. This patient's life was in the balance for many days, but he finally recovered.

Case XIV. Burn, a girl of 16, admitted in July, 1865. She then labored under a severe attack of typhus, being well spotted. She was so far advanced as to be sent to the Convalescent House, when she again sickened, complaining of her head, and this again followed by great raving and high fever. When now a week ill, the spots of enteric fever made their appearance. These were unusually well marked, being few in number, and confined to the sides of the chest and abdomen; but there was no other symptom whatever of enteric fever, and they were looked for, I need scarcely say, with the greatest

minuteness, nor did any such appear. At this stage of her illness, the patient was seen by Dr. Murchison, of London, who was visiting Dublin at the time, but who, I regret to say, I was not fortunate enough to meet.

Such is the series of cases which I wish to bring under the notice of the Association this evening. When added to those already given in the two former papers—and did time permit, I could have given other similar cases—they appear to me to afford the strongest proof the question is capable of eliciting, that we must consider the two types of fever known as typhus and enteric as the result of one poison. If this be not the correct view to take of the matter, I confess myself quite unable to explain the cases of the mixed types detailed this evening; for it must have been observed, as each was given, how the symptoms of each type of fever were mixed up together. As there is not time, however, to go over each symptom in detail, I shall notice but one, on which most, if not all, who hold different views from my own, seemed to have placed the greatest weight of their argument. I mean the spots said to be characteristic of enteric fever. On this point, I think I may say with certainty that these lenticular red spots, and few in number, have not the value which has been given them; for I have seen them now in many instances, and some have been given this evening where, whilst they existed, there was not another symptom of the ileum being engaged—at least I could make out no evidence of such a lesion, though looking specially for it. Here, then, were cases where the particular spots existed, but not the lesion of which they are said to be diagnostic. But, further still, I have given cases to-night where, with the enteric spots, there was also a typhus rash. As bearing on this particular point, I would just recall the case of the man Develin, where the enteric spots first appeared, then the typhus rash, and as this latter disappeared the enteric spots were again visible. If this be not a case in point, I know not what is; and I shall be glad to hear some explanation of this from any gentleman who differs from me. As regards the spots of typhus fever generally, I have got an impression that a good deal of misconception exists. I have heard some speak of the bright and the dark spots, as if there were a difference between them. On this point, I can state with certainty that it is very common to see the two on the same individual, and at the same time. This may be seen on the body itself, but it is more common to have them dark on the body and a bright red on the arms. Again, the spots of enteric fever are described as recurring again and

again, and this is quite true. But it does not seem to be so generally known that the same may be seen in typhus, for I have witnessed cases where a distinct second crop of eruption appeared; nor is the observation original, as I have read of it in one of the olden authors, though I cannot at this moment give his name. So also of the statement that petechiæ are never seen on the face. This is positively incorrect, as I have noted several cases where they were quite distinct. But these points are only mentioned here as bearing indirectly on the point under discussion. Still, I think they are enough to show that any positive statements about the rash in fever must be received with caution, as the variety is truly very great. I cannot, however, pursue the subject further here.

In the course of these observations it has been stated that the enteric type of fever must be due to a something else rather than a particular poison; and if asked what that is, I would state my impression that it only occurs in persons of a peculiar constitution, most probably closely connected, if not identical, with the strumous. This idea I have stated before; but every year is increasing my conviction on the point, and if it should turn out to be correct, I need scarcely say how important it would be. I know not whether the idea has struck any one else, but it is not stated in any one of the works on the subject that I have seen. My reasons for holding this view are the following: The enteric fever is very constantly indeed met in persons of a fine skin, and I have now seen several instances where scars, evidently strumous, existed in the neck of persons who had this type of fever. Again, it is much more common under 30 years of age—that is, when the tendency to struma is known to be strongest. I am aware that this remark may be objected to, inasmuch as every type of fever is more frequent under 30; but what I would convey is this, that whilst typhus is common after 30, 40, and 50, enteric fever is exceedingly rare. I myself have not met it in any instance above 35, though it has, I know, been seen later; but, further still, every one is aware that in the course of enteric fever the lungs are very apt to become engaged. But in place of this affection passing off with the fever, as it does in typhus, it is by no means uncommon to meet cases where signs like phthisis declare themselves. The pulse keeps up, sweating occurs, and the cough is very troublesome and hard to relieve. I have said that such is common after enteric fever, and I have been forced to send several out of hospital in this state with the hope that change of air would benefit them, and in some I know that I

heard of subsequently it had proved successful. That the idea I would put forward is not without some surer foundation than mere impression, I may cite the following instance:

Case XV. C., a girl of 16, was admitted into the Cork Street Hospital in January of the present year. She had a very fine skin, with light eyes and hair, and labored under enteric fever in a very well-marked form. The diarrhœa proved most obstinate; but as the abdominal symptoms yielded the lungs got very much engaged from general bronchitis of the minute tubes, and for more than ten days the dyspnœa was of the most urgent character, the lips being quite livid and the distress very great. Though the urgency of this state lessened, the pulse still kept up, and the patient began to have regular sweats, and, finally, I was able to observe that the upper part of the right lung was becoming solidified. Nor did the disease stop here, for in a period of about seven weeks I was able to trace weekly the process of softening going on, till at last a cavity was formed. In this state the patient left the hospital, the physical signs in the top of the lung being those of a cavity, but the rest of the lungs being apparently quite sound, and as the patient's passage had been taken for America, it is just possible the predisposition to tubercle, which seemed so strong in this girl, may be averted, and she might yet live to old age.

Lastly, on this question of the connexion, or supposed connexion, between enteric fever and the strumous diathesis, I would just advert to the great similarity which obtains between the lesion found in the fever and that which so often exists in ordinary phthisis. For my own part, I must say that I have seen many specimens where I could not distinguish them, and I shall be glad to hear any gentleman express his opinion on the point.

The general question brought before the Association this evening is not, as some think, one of mere curiosity. It is of every importance that it should be settled. The diagnosis, prognosis, and treatment of the disease all hinge upon it. For if typhus be the specific fever which some think it, it is obvious that the treatment will differ from what it would do were the enteric lesion present at the same time, and the danger of allowing such a lesion to pursue its course unchecked would indeed be very great. On the other hand, those who hold with myself that the two types of fever may arise from the one poison and coëxist, will always be on the look-out for such a complication, and will act accordingly. For myself, I believe I have often had to deal with such cases, and to alter or modify the

treatment as the case required, and that this is not a mere belief I have reserved for this part of my remarks the details of the following cases, which have, however, been on a former occasion detailed:

Case XVI. A girl 20 years of age was attacked with fever of a severe kind. Raving occurred and petechiæ very early, and these latter spread over the entire body. With these symptoms there was also severe diarrhœa and tympanitis. Matters went from bad to worse, and the patient died about the fourteenth day of the fever. On *post mortem* examination, the lower portion of the ileum was found extensively ulcerated, Peyer's patches being the parts engaged.

Case XVII. A boy of 14, who had already learned to drink, was attacked with fever. He had much stupor and moaning, both night and day, and he presented a copious petechial rash over the body. With this state he had tympany and diarrhœa, and, finally, involuntary stools and death. On examination, extensive ulceration in patches was found in the lower portion of the ileum. The brain presented the usual appearances found in cases of fever, but in a lesser degree than is common. I should say at the time this case occurred I was much surprised at the result of the *post mortem*, for I then believed the enteric lesion could not exist with regular typhus, which the boy otherwise presented.

Case XVIII. Hill, a girl of 18, fine skin, was admitted into hospital, after being nine days ill of fever, which presented all the signs of the enteric type, including the spots, which appeared the day after admission. These did not, however, go through the usual course of such spots. They gradually increased in numbers, spreading to the chest, arms, and, finally, to the face, and in this state many of them could not be distinguished from regular petechiæ, being large, dark, and ill-defined. My colleague, as he was then, Dr. Aquilla Smith, saw the patient at this period. By the fourteenth day of the fever, all the signs of enteric fever seemed to have subsided, but there was no corresponding change in the state of the patient. Her nights became restless, she shortly lay on her back, sordes formed on the nostrils, lips, and tongue, and she got great tremor of the upper extremities—in fact, she presented all the signs of well-marked typhus, and died on the twenty-first day of her illness. Except in the lower portion of the ileum, nothing abnormal was found, and here the signs of disease were slight but well marked. Peyer's patches were much plainer than natural, and this became more apparent as the valve was

approached, for here one of an inch in length and a-third in breadth was prominent and brought out in strong relief, but it had not ulcerated. The impression given by the inspection was, that irritation had recently been going on in the part but had somewhat subsided. The specimen was exhibited before the Pathological Society.

Case XIX. Bellew, a servant, aged 45, of tall stature, and thin, admitted in May, 1862, with all the signs of fever in a very severe form. He had to be supported into the hospital, and, though only one week ill, was already densely spotted; his tongue dry and brown; eyes very much injected, and expression heavy. There was also severe diarrhœa, which seemed to cease suddenly within forty-eight hours—that is, about the eighth day of the fever. From this out the attack was as genuine typhus as it is possible to describe. The spots became of the darkest, the mind very confused, with constant rambling, and passing under him. There was difficulty in putting out the tongue, and, late in the illness, hiccup. By the eighteenth day the symptoms had materially improved. The spots were gone, the tongue had expanded and was put out better, and he took support well. It was evident, however, the fever had not resolved itself. The pulse had not fallen in proportion, nor the tongue cleaned, and he still remained heavy and, at times, would ramble. In this state he went on till the twenty-fifth day, when he died. There was no effort at crisis at any time, nor any tympany. I was only able to examine the abdomen. The ileum had no ulceration in it, but it was very red in patches, and the more so the nearer we got to the cœcum. In this last organ, the chief lesion was found, for it was ulcerated in patches, one as large as a shilling. The ascending colon had a number of small and distinct ulcers in it. The glands of the mesentery were not enlarged. It is scarcely necessary to observe that Louis' observations prove that the colon is often engaged in enteric fever, similar to what has been just described.

It appears to me these cases afford as strong a proof as the nature of the subject admits, that the enteric lesion may coëxist with a petechial rash, or, in other words, with typhus fever. On my own mind there now exists not a shadow of doubt of the fact, and if this be not the proper view to take of the matter, I must ask those who differ from me to explain it otherwise. What has been advanced are facts, put what interpretation on them we may. Nor would the slightest difficulty exist in giving other cases, and some striking ones have occurred within the last month; but I prefer now to glance at what others have

seen; for if no one else had met similar cases to my own, there would indeed be strong grounds for questioning my powers of observation, and, necessarily, the correctness of what I have stated. I refer, then, my hearers to the lectures of the late Dr. Todd, in which they will find some cases exactly like those given this evening—that is, the enteric type of fever attended by a copious measly rash. Some of these, too, died, and the specific lesion of the intestine was found. Again, in Chambers' "Clinical Lectures," may be found cases of exactly the same kind, and also examples of the two types of fever coming from the same room. Here, then, are two London physicians who fully bear out what has been advanced this evening, and I quote them the more readily, as they have managed to see a class of cases which, by some strange fatality, never seem to have come under the notice of Dr. Jenner and those who agree with him; but, further, I observe that Dr. Lyons, when in the Crimea, met the two types of fever in the combined form, and states, especially in his work, that whilst the rash was genuine typhus, the lesion often found was ulceration of Peyer's patches. In a paper, too, which has just appeared, by Dr. Law, on "Fever," one of the cases given is described as a typhoid case, as I believe it was, and yet the rash was a copious measly one. Lastly, the Drs. Martin, from Berlin, whose names I have already mentioned, told me the two types of fever were commonly looked on as the same disease, and that the enteric type was there called abdominal typhus. I have not the least doubt that had more time been given I could have got further evidence in the same direction; but enough, it appears to me, has been advanced for my present purpose. I do not, for a moment, assert that the question is settled on my side; but I do maintain that enough has been stated this evening to show gentlemen who differ from me the need of a cautious reserve on this question, and in not allowing themselves to come to a decided conclusion till all the facts of the case are clearly before them.

Before concluding these remarks, I would advert for one moment to one other symptom, which some have thought was characteristic of the enteric type of fever—I mean hemorrhage, whether from the nose or the bowels. The London physicians especially, look on it in this light, but it certainly is not correct as regards Dublin. With us, typhus often exhibits epistaxis, both in its earlier and more advanced stages. In the summer it is very common, particularly when the temperature ranges high; but it is much more frequent in some years than others. And,

again, as regards bleeding from the intestines, I myself have put on record some thirty cases—most of them regular typhus—in which bleedings, more or less severe, occurred, and in some that proved fatal and were examined not a trace of ulceration was found. So that bleedings cannot in any way be considered as specially diagnostic of enteric fever, and I do believe the same may be said of any other symptom that might be chosen. I would repeat, however, that it is quite another matter distinguishing between the several types of fever. This can very usually be done, and ought, of course, always be attempted; but that the types of fever will often be found united I cannot doubt, and I think the time will come when the natural history of fevers—for this is really the question at issue—will be looked on in a very different light from what it at present is.

On the treatment of fever, I have here little to say. As a single remedy, and in the ordinary typhus, I find balm still the best. It seems to me to act as an antiseptic, and to fulfil the indications required better than any other agent with which I am acquainted. I consider, too, that, to a certain extent, it supplies the place of wine: and this is no little matter to be able to say of it. Under its use the mortality, in spotted cases, has, I believe, been reduced to the lowest on record. But having spoken of these several points on a former occasion, as likewise the dose and method of using it, and the precautions to be adopted, I shall not enter upon them further now.

Of the treatment of the enteric type of fever, I have only to repeat that, when seen early, it appears to me the most amenable of the several forms of the disease. I mention this, because elsewhere, particularly in London, it seems to be a very fatal disease. Like typhus, it appears as if it were a more severe disease there than with us in Dublin. Though not easily accounted for, this may be so. Still, my conviction is, that treatment has a more decided effect on it than any other type of fever. For myself, I use astringents, and from an early stage of the attack, and it is the dilute sulphuric acid on which I chiefly rely. This is the medicine recommended by Huss, and in the proportion of one, two, or three drachms to an eight-ounce mixture, I have found it most useful. Two or three drops of laudanum are added to each ounce of the mixture, which is repeated according to the urgency of the case. It is, however, to be observed that the diarrhœa is only to be moderated, not directly checked; and this rule is the more important the earlier the disease is seen. If the diarrhœa be stopped too soon or too suddenly, mischief elsewhere than in the intestines will

arise. It may be in the chest, or the brain may be the organ that suffers. Several such cases have come under my notice; but though some of these were severe, none proved fatal. One, however, was so remarkable that I must give it here; for the checking the diarrhœa had, or seemed to have, the effect of altering the type of fever under my very eye:

Case XX. Kelly, a man of 19, having a fine skin, was admitted into hospital, laboring under the enteric type of fever in a well-marked form. He presented the characteristic diarrhœa and also the spots, and had been nine days ill. After three doses of the acid mixture the diarrhœa suddenly ceased, and was at once succeeded by symptoms referred to the head. His eyes, which before had been quite clear, became deeply injected; he complained of headache, his face flushed, he began to rave, and in the course of two days he presented the countenance of a well-marked typhus case, his tongue and lips being then covered with sordes. In this state, and when now about twelve days ill, his nose began to bleed, and this was repeated daily three times, so that he bled in all on four occasions. The first of these the bleeding was much the most, and they were all so obviously beneficial that they were not interfered with. The patient made a good though very slow recovery. There was no recurrence of symptoms referable to the intestines. I have seen several instances like the one just given, but none so striking, and none which proved fatal. When, however, any similar instance occurs, it may be assumed that the case is quite within our control.—*Medical Press and Circular, June 20, 1866, p. 647.*

ON THE USE OF STRYCHNINE IN EPILEPSY.

By WALTER TYRRELL, Esq., Malvern.

[Mr. Tyrrell published a paper on this subject in May, 1867.]

I stated at the end of my former paper, my belief that "in strychnine we possess a drug which will always control the excitability of the medulla oblongata, and restrain the attacks of convulsion." This opinion will, I think, be found to be remarkably strengthened by a perusal of the following cases. One most important fact is to be gathered from them, *viz.*, that large doses of the drug must be given to produce the favorable results. In some of the cases the doses may appear formidable, but I feel confident that with care and watchfulness no ill ef-

fects need follow their administration to the epileptic. In such cases the system appears to lose its susceptibility; and the drug, even in large doses, produces none of the ordinary signs of disagreement. In no case have I seen it produce any mischievous excitement or irritation; and I may state that in one very severe case, still under treatment, I have carried the dose as high as one-fifth of a grain, taken twice daily, and this continued for nearly three weeks together, not only without its producing the slightest sign of irritation, but, on the contrary, the most marked diminution in the frequency and violence of the attacks. The following case, although the attacks had but recently come on, is interesting, as showing how rapidly the beneficial effect of strychnine is often gained, no attacks having supervened after two doses (each of one-twelfth of a grain) had been taken.

H. R., aged 29, has been of late years much exposed to heat in China, Singapore, and Japan; had congestion of the liver in March, 1865; was invalided home in June, 1865; since which time he has been living at home, under treatment for enlargement of the liver, using iodide of potassium and iodine ointment locally. On May 22, of this year—a very cold, snowy day—he imprudently stayed out all day fishing, and at dinner that evening was seized with a violent epileptic fit, accompanied with great convulsion; this was followed by other attacks at the following intervals: May 25, three fits, at intervals of one hour and a-half; May 30, a fit in the evening; June 1, two fits, with six hours' interval; June 2, one fit in the evening. On June 5, he arrived in Malvern, and I prescribed for him one-twelfth of a grain of strychnia twice daily, allowing him to continue his potash in rather increased quantity. On the morning of the 6th, he had three fits, during the first of which I was present; they were very convulsive, and produced an extremely prostrating effect on his mind—so much so, that even after the ordinary stupor had passed off, he was unable to answer the simplest question without consideration and great hesitation. It is needless to give a daily report of this case. I increased the dose of the strychnine to one-eighth of a grain; he had no further attacks; and his return to health, both bodily and mental, although gradual, was most perfect. He is now at the seaside, and may be considered, to all intents and purposes, convalescent. In this case, it was curious to observe how the inclination to an attack (which occurred several times during the early treatment of the case) yielded at once to a slight increase in the strength of the dose. I may say that in

this case I found the use of ice to the nape very useful, insuring quiet sleep, and also allaying a frequent tendency to irritability.

In the following case, where the attacks were dependent on menstrual irregularity, the utility of combining the strychnine with remedies directed to the removal of the exciting cause will be apparent.

L. A., aged 17, a not unhealthy looking girl, has never menstruated properly; has been subject to epilepsy for four years, the interval never having been longer than one week; the attacks vary in intensity, a slight one being sooner followed by others. In this case, I commenced with one-sixteenth of a grain of strychnia twice daily, gradually carried up to the tenth, at the same time giving her aloes and myrrh, and assafœtida in pills twice daily. In this case, a perfect immunity from attacks commenced with the treatment, and has continued up to the present day, a period of nearly three months. Although the menstrual irregularity has not entirely ceased, it is very much ameliorated. I used, also, in this case, the cold effusion to the nape, coupling it at times with the application of warmth to the feet. This case, although not severe, is a type of a very prevalent form of the disorder, and shows how amenable such cases are to treatment. In another case, somewhat similar, which is still under treatment, I have the greatest benefit from the use of the bromide of potassium in combination with strychnia.

E. H., aged 14, a fair girl, partially paralyzed on the left side. When two years old had what was called brain fever, during which she was insensible for a length of time; recovered, but had a return about two years ago. Since the first attack she has been subject to continued attacks of *petit mal.*, sometimes five and six in the day. She turns slightly to the right; is slightly convulsed; sometimes is partially conscious during them, and tries to talk; sometimes she bites her tongue; her manner is silly, being fond of repeating lines of poetry, for which her memory is good. She has slight tenderness on pressure over the upper cervical vertebræ, and on percussing the atlas with the finger points she complains of pain at the epigastrium. The attacks sometimes come on during sleep. I will give here an extract from the diary kept by the parents. The patient came under my care in May, and I prescribed for her: ℞. Tinct. nucis vomicæ ℥iij, syr. aurantii ℥j. M., cap. ℥j bis in die ex aqua.

The following is a diary from May 29 up to the stoppage of the attacks:

May 29. Four fits in the day; two in the night.

30th. No fits in the day, but eight in the night, two of them being severe.

31st. One fit in the morning; eight again at night, but less severe.

June 1. No fit in the day; four at night.

2d. No fit in the day; five at night.

3d. No fit in the day; four at night.

4th. No fit in the day; three at night.

5th. No fit in the day; three slight ones at night.

6th. No fit in the day, and if any at night very slight.

7th. No fit in the day; only one observed at night.

8th. No fits day or night.

9th. No fits day or night.

10th. No fit.

11th. No fit.

12th. No fit.

And so on. Since this date she has continued almost entirely free from attacks, but few having occurred, and those of an altered and much slighter character, which yield readily to a slightly increased dose of the strychnine.

Although the following case is still under treatment, yet I think a slight sketch of it cannot fail to be interesting as exhibiting the effects of strychnine in very severe convulsive epilepsy, and as also showing what large doses of the drug may be given with impunity. This patient who has suffered for some years, is one of the severest cases of the disorder I have ever seen. I commenced treating him on the 15th June last, and as the case is still under treatment, I will merely give a comparative table of the number of his attacks during May of the present year and July. During the former month, he was under no treatment of any kind. During July, he was taking strychnine in the doses appended to the table. The attacks, which occurred almost exclusively at night, were most violently convulsive. They were much influenced by atmospheric changes, heavy thundery weather invariably increasing both their number and severity. Thus July would, under ordinary circumstances, be his most unfavorable month. In addition to the strychnine, during part of the month, he was using cold affusion to the nape and ice to the occiput during the night.

No Treatment.

May 1, 1867,	2 fits	May 17, 1867,	1 fit
" 2, "	1	" 18, "	0
" 3, "	2	" 19, "	0

" 4, "	3	" 20, "	0
" 5, "	2	" 21, "	1
" 6, "	3	" 22, "	0
" 7, "	2	" 23, "	2
" 8, "	2	" 24, "	2
" 9, "	1	" 25, "	3
" 10, "	0	" 26, "	3
" 11, "	2	" 27, "	2
" 12, "	2	" 28, "	1
" 13, "	4	" 29, "	2
" 14, "	3	" 30, "	0
" 15, "	3	" 31, "	0
" 16, "	3		

Under Strychnine.

	Fits.			Fits.	
July 1, 1867,	0	$\frac{1}{8}$ gr.	July 16, 1867,	3	
" 2, "	1	very slight,	" 17, "	0	$\frac{1}{5}$ gr.
" 3, "	1	very slight, no con.	" 18, "	0	
			" 19, "	0	
" 4, "	0		" 20, "	0	
" 5, "	0		" 21, "	0	
" 6, "	0		" 22, "	0	
" 7, "	1		" 23, "	0	
" 8, "	2		" 24, "	0	
" 9, "	0	$\frac{1}{6}$ gr.	" 25, "	0	
" 10, "	0		" 26, "	0	
" 11, "	0		" 27, "	1	
" 12, "	0		" 28, "	1	
" 13, "	0		" 29, "	0	
" 14, "	1	$\frac{1}{12}$ gr.	" 30, "	0	
" 15, "	0		" 31, "	0	

On July 14, owing to a misunderstanding, he only had $\frac{1}{12}$ of a grain instead of $\frac{1}{6}$. It will be seen that four fits followed in rapid succession. I think this table shows the power which strychnine possesses in restraining the epileptic attacks. I may add that, although so remarkably lessened in number, they were not at all increased in severity, but, on the contrary, were less convulsive. The above table gives the following results:

May.		July.	
No. of attacks.	Nights free.	No. of attacks.	Nights free.
51	7	11	23

It will be observed that during the latter half of the month, the dose of strychnine was as high as $\frac{1}{5}$ of a grain, taken twice

daily, and this without its producing the slightest sign of excitement or irritation. In combination with the strychnine, the patient is taking the infusion of digitalis.

In conclusion, I would reiterate the summing up of my last paper: "That in strychnine we possess a drug which will *always* control the excitability of the medulla oblongata and prevent convulsions, but that to cure the disease we must also remove the exciting cause.—*Medical Times & Gazette, Aug. 24, 1867, p. 201.—Braithwaite's Retrospect.*

Book Notices.

Atlas of Venereal Diseases. By A. Cullerier, Surgeon to the Hospital Du Mida; Member of the Surgical Society of Paris; etc., etc., etc. Translated from the French, with notes and additions, by Freeman J. Bumstead, M.D., Prof. of Venereal Diseases in the College of Physicians and Surgeons of New York. With about One Hundred and Fifty Beautifully Colored Figures on Twenty-Six Plates. Philadelphia: Henry C. Lea. 1868. To be completed in five parts, $3 each.

This is one of the most elegantly published and valuable works that ha been reprinted and edited in this country, relating to the loathsome, though important, class of venereal diseases. The author and editor are alike men of experience and eminent ability; and we freely commend this product of their labors to the general patronage of the profession. Parts I and II are already in our bookstores.

The Diagnosis, Pathology, and Treatment of Diseases of Women, Including the Diagnosis of Pregnancy. By Graily Hewitt, M.D., London, F.R.C.P., Prof. Midwifery and Diseases of Women, University College, and Obstetric Physician to the Hospital, etc., etc. First American, from the Second London Edition, Revised and Enlarged. With 116 Illustrations. Philadelphia: Lindsay & Blakiston. 1868.

This is a handsome octavo volume of 707 pages. It includes a consideration of all the diseases and accidents usually regarded as peculiar to the female sex, and is well adapted both as a text-book for students and as a work of reference for the practitioner. We have neither time nor space to speak of its contents in detail.

Electro-Physiology and Therapeutics: Being a Study of the Electrical and other Physical Phenomena of the Muscular and other Systems during Health and Disease, including the Phenomenon of Electrical Fishes. By CHARLES E. MORGAN, A.B., M.D. New York: WM. WOOD & Co. 1868.

This is certainly one of the most important works of a scientific character, that has been issued from the American Press. It contains 714 pages, closely printed; and presents the reader with a complete review of all that is known in relation to electricity and its connection with the phenomena of living matter in health and disease. It merits a place in the library of every physician and cultivator of the natural sciences.

A Treatise on General Pathology, and its Relations to Practical Medicine. By CHARLES L. CARTER, M.D., Honorary Member of the St. Louis Medical Society; lately Surgeon in U.S. Army. St. Louis: GEORGE KNAPP & Co. 1867.

This is an octavo volume of 149 pages, on fair type and paper. It embraces a discussion of the topics usually included under the head of general pathology. The special merits of the work we shall examine more carefully hereafter.

Lectures on the Causes, Pathology, and Treatment of Joint Diseases. Delivered at the McGill University Medical College, Montreal, Canada. By LOUIS BAUER, M.D., M.R.C.S., Eng., Prof. of Anatomy and Clinical Surgery, etc., etc., etc. Reprinted from the Canada Medical Journal. New York: WM. WOOD & Co., 61 Walker Street. 1868. Pp. 96.

This is an octavo volume, well illustrated with cuts. It is just what its title indicates, namely, a monograph on the causes,

pathology, and treatment of diseases of the joints. The author is an independent thinker, thoroughly conversant with his subject, theoretically and practically. Hence, his work can be read with pleasure and profit both by students and practitioners.

Annual Abstract of Therapeutics, Materia Medica, Pharmacy, and Toxicology, for 1867; followed by an Original Memoir On Gout, Gravel, and Urinary Calculi, by A. BOUCHARDAT, Prof. of Hygiene to the Faculty of Medicine, Paris; etc., etc., etc. Translated and Edited by M. J. DE ROSSET, M.D., Adjunct to the Professor of Chemistry in the University of Maryland, etc., etc. Philadelphia: LINDSAY & BLAKISTON. 1868.

This is a duodecimo volume of 314 pages, neatly bound. Its contents are well indicated by the above title. It will be found very useful to both physicians and druggists.

Felix Von Niemeyer's Clinical Lectures on Pulmonary Phthisis. Translated, by permission of the Author, from the Second German Edition, by J. L. PARKE. New York: MOORHEAD, SIMPSON, & BOND. 1868.

For sale by the Western News Co., Chicago.

Editorial.

MEDICAL SOCIETY MEETINGS.—The Indiana State Medical Society will meet at Indianapolis on Tuesday, May 19th, 1868.

The Illinois State Medical Society holds its next meeting in Quincy, commencing May 19th, 1868.

The Military Tract Medical Association holds its next meeting at Kewanee, on Tuesday, May 12th, 1868.

RICHMOND MEDICAL JOURNAL.—This excellent monthly medical periodical, an advertisement of which will be found in our advertising columns, can be furnished to the subscribers of the EXAMINER for $3.00 per annum.

Summer Teaching.—The Chicago Medical College has an excellent class of students attending the summer reading and clinical course of instruction.

Homœopathy and the Michigan University.—It is understood that the Board of Regents of Michigan University have finally accepted the appropriation of money by the Legislature of that State, which was made on the condition that a Chair of Homœopathy should be established as a part of the medical department of the University. This action has caused a part of the medical faculty to resign, and will probably break up the medical department entirely, or at least destroy all its importance. If it results in nullifying the medical department at Ann Arbor, and the establishment of an independent medical college in Detroit, where clinical instruction can be made a part of the regular course, it will be a positive benefit to the profession and to the people of that State.

If the remaining members of the present medical faculty in the University resign, it will be impossible for the Regents to fill their places in connection with their homœopathic projects; because neither the University nor its diploma will be longer recognized by other medical colleges and associations.

Medical College Graduates.—The following list shows the number of graduates, at the close of the last annual term of instruction, in most of the medical colleges in the United States:

Jefferson Medical College, Philadelphia,	159
Med. Department of University of Penn., Phila.,	153
Rush Medical College, Chicago,	116
Bellevue Hospital Medical College, New York,	111
College of Physicians and Surgeons, "	104
Med. Dep't of University of Nashville, Tenn.,	85
Med. Department of New York University,	82
Med. Department of University of Michigan,	76
Medical College of Ohio, Cincinnati,	54
Chicago Medical College,	50
Massachusetts Medical College, Boston,	48

Med. Dep't of University of La., New Orleans,	46
St. Louis Medical College,	46
Med. Dep't of University of Louisville, Ky.,	46
Buffalo Medical College, N.Y.,	40
Miami Medical College, Cincinnati,	29
New Orleans School of Medicine,	28
Medical College of South Carolina,	27
Charity Hospital Medical College, Cleveland,	27
Med. Dep't Harvard University, Boston,	26
Missouri Medical College, St. Louis,	26
Tolland Medical College, San Francisco,	13
Cincinnati College of Medicine and Surgery,	10

There are several other medical colleges in different parts of the country, not included in the above list. It is probable that the entire list would make the total number of regular medical college graduates in the United States, for the year 1868, about 1525.

Money Receipts to April 23d.—Drs. M. T. Darling, $6; W. H. Frazer, 3; Edmund Andrews, 3; W. H. Cook, 3; L. Humphreys, 3; F. L. Flanders, 3; W. P. Welsh, 3; S. H. Bottomly, 3; James Brewster, 6; Martin I. Whitman, 3; Orin Peak, 3; E. Dyson, 3; James Miner, 3; C. C. Crocker, 3; Mary H. Thompson, 3; H. H. Deming, 3.

FLUID EXTRACTS.

The attention of physicians has been turned of late to the general unreliability, and, sometimes, entire worthlessness of the fluid extracts in common use. This inefficiency may be due to the quality of the drug used, or the dishonesty of the manufacturer, but is in most cases, more probably, the result of the mode of preparation. The trouble seems to lie with those drugs whose medicinal effect depends on volatile principles, which would be envolved on application of even a low degree of heat.

Here then is the difficulty that the use of heat renders the extract valueless, because it deprives it of its only valuable ingredient. To dispense then with this dangerous agent is the effort of every manufacturer.

Different makers have adopted different methods, involving the use, however, of more or less heat, but none have achieved the result desired, till Dr. Samuel P. Duffield, of Detroit, an-

nounced his process in which he avoids the use of any heat whatever. The following is a short description of this valuable improvement:

"The drug is ground to a coarse powder and placed dry in an iron cylinder. The air is then exhausted by means of an air pump, causing the pores of the drug to give up the air contained in them, and permit the entrance of the menstrum, which is forcibly sucked in through a syphon tube. The effect of this is to impregnate the menstrum with the entire soluble and medicinal properties of the drug, and thus rendering after concentration with the aid of heat unnecessary."

The theory of the above process seems clearly superior to others in use, and the practical workings of it, produce results as we would anticipate.

Many of our leading physicians, among whom we might mention Professors Weber and Scott, of Cleveland, Professor Armor, of Michigan University, Professor Hildreth, of Chicago, have tried fluid extracts made according to Dr. Duffield's process, by Duffield, Parke & Co., of Detroit, with a view to thoroughly test their merits, and have pronounced them decidedly superior to others in use.

In general appearance they differ much from the dark-colored preparations to which we are accustomed. The standard is that of the U. S. Pharmacopœa, sixteen troy ounces of the drug to the fluid pint.—*The Cincinnati Lancet and Observer.*

Gonorrhœa.—*Starch Injections.*—Finely powdered starch mixed with lukewarm water, so as to obtain a fluid of the substance of cream, but thin enough to allow of injection, forms a most successful injection in cases of gonorrhœa, especially after the inflammatory stage is over.—[M. Luc.]—*Braith. Ret.*

Eczema.—*Iodide of Lead.*—Iodide of lead is a remedy of great value in eczema. It should be applied in the form of an ointment, 12 grains to the ounce, with 1 drachm of glycerine, and 40 minims of chloroform, to relieve the itching. Another formula is the following: Iodide of lead, 20 grains; simple ointment, 7 drachms; glycerine, 1 drachm. The ointment of iodide of lead of the present pharmacopœia is too strong for cases of chronic eczema or psoriasis; it contains 62 grains to the ounce; whereas, from a-fifth to a-fourth of that quantity is sufficient, and more useful than the pharmacopœial strength. The use of constitutional treatment must be combined with this.—[Dr. W. T. Belcher.]—*Braithwaite's Retrospect.*

ANNUAL MEETING OF THE BOARD OF HEALTH.

ELECTION OF OFFICERS.

REPORT OF THE HEALTH OFFICER FOR THE YEAR ENDING APRIL 1, 1868.

The Annual Meeting of the Board of Health was held on the 6th of April, 1868, Mayor Rice in the chair, and present, Commissioners Rauch, Wagner, Giles, Hoard, and Reynolds.

On motion of Commissioner Reynolds, the Mayor was unanimously reëlected the President of the Board.

The Committees on finance, ordinances, sanitary matters, and streets and alleys, were filled with the same members as on last year. They are as follows:—

Sanitary Committee.—Dr. Rauch, Dr. Johnson, Dr. Wagner.

Finance Committee.—Messrs Hoard, Giles, and Rauch.

Committee on Ordinances.—Messrs Johnson, Hoard, and Reynolds.

Committee on Streets and Alleys.—Messrs Giles, Reynolds, and Hoard.

On motion, Ambrose Burnham was reëlected health officer until April 1, 1869, and J. S. Kline was reëlected secretary of the Board for the same period.

Applications from S. W. Lee, G. W. Bonham, and E. Wood, for situations as sanitary policemen, were referred to the committee on appointments.

The following is the report of A. Burnham, health officer, for the year ending March 21, 1868:—

HEALTH OFFICE, CHICAGO, *April 1, 1868.*

To the Honorable the Board of Health of the City of Chicago:

GENTLEMEN,—I have the honor to present the following report for the last municipal year, of work done from the first day of April, 1867, to the first day of April, 1868:—

NUMBER OF NUISANCES REPORTED AND ABATED ON NOTICES.

Ashes and rubbish on streets, yards and alleys,	1,514	Filthy houses,	301
Garbage,	1,313	Filthy hog-pens,	65
Manure piles,	10,653	Filthy hide stores and cellers,	45
Full privies,	8,192	Filthy privies,	1,722
Filthy alleys and areas	4,079	Filthy premises,	47
Filthy butcher shops,	6	Filthy packing houses,	7
Filthy basements,	63	Filthy soap factories,	3
Filthy cellars,	63	Filthy stables,	1,117
Filthy catch basins,	6	Filthy sinks,	735
Filthy cesspools and cisterns	135	Filthy slaughter-houses,	5
Filthy drains,	534	Filthy tanneries,	5
Filthy distilleries,	6	Filthy vacant lots,	326
Filthy gutters on streets & alleys,	1,457	Filthy water closets,	348
Filthy grocery stores,	10	Total,	32,808

Number of notices served to connect premises with sewers, ---------- 1,859
Premises connected, -------- 1,097 | New privy vaults built, -------- 853
Total number of all notices served, ---------- 35,520

Loads of ashes removed, 7,247, about equally divided among all the divisions of the City:—

Loads of ashes removed from the South Division, ---------- 6,318
Loads of ashes removed from the West Division, ---------- 750
Loads of ashes removed from the North Division, ---------- 698

Total loads of ashes removed, ---------- 7,769
Barrels of rotten apples, potatoes, eggs, fish, and pickles, ---------- 1,342
Baskets and boxes of decayed peaches, grapes, oranges, and lemons, -- 773
Barrels and bags of damaged poultry removed, ---------- 36

Number of dead animals removed by City scavengers:—

Horses, ----------	148	Hogs, ----------	49	Chickens, ----------	4090
Sheep, ----------	67	Dogs and cats, -----	7093		
Cows, ----------	24			Total, --------	12,281

Main sewers disinfected, ----------	3	Sloughs and slips disinfected, ----	35
Private sewers disinfected, ------	1735	Total, ----------	1773
Miles of streets and alleys disinfected, ----------	1146	Houses disinfected, ----------	274
		Privies disinfected, ----------	2150

SMALL-POX.

The cases of small-pox in the City during the year were as follows:—

1st Ward ----------	27	10th Ward ----------	44		
2d Ward ----------	112	11th Ward ----------	90		
3d Ward ----------	97	12th Ward ----------	43		
4th Ward ----------	58	13th Ward ----------	13		
5th Ward ----------	153	14th Ward ----------	43		
6th Ward ----------	104	15th Ward ----------	80		
7th Ward ----------	170	16th Ward ----------	36		
8th Ward ----------	74				
9th Ward ----------	46	Total, ----------	1193		

The cases as reported by months were as follows:—

April, ----------	28	August, ----------	36	December, -------	157
May, ----------	20	September, ---------	23	January, --------	228
June, ----------	39	October, ----------	47	February, -------	247
July, ----------	47	November, ---------	137	March, ----------	184

VARIOLOID.

The varioloid cases in the several wards were as follows:—

1st Ward --------	22	7th Ward ----------	86	13th Ward -------	2
2d Ward --------	48	8th Ward ----------	48	14th Ward -------	31
3d Ward --------	56	9th Ward ----------	17	15th Ward -------	29
4th Ward --------	34	10th Ward ----------	21	16th Ward -------	22
5th Ward --------	35	11th Ward ----------	35		
6th Ward --------	62	12th Ward ----------	10	Total, ----------	528

The total number of varioloid and small-pox cases in the City for the year was 1721.

The total number of patients removed to the small-pox hospital was 303.

The number of houses under sanitary inspection, where small-pox patients reside, were 1488.

The number of summons served for violation of the health ordinances was 1551.

The amount of fines assessed for the year was $5576,20.

A. BURNHAM, Health Officer.

Mortality Report for the Month of March:—

CAUSES OF DEATH.

Accident, drowned,	2	Dysentery	1	Liver, abscess of	1
Accident, fall	1	Encephalites	2	Liver, inflammation of	1
Accident, fall by horse	1	Enteritis	1	Lungs, congestion of	3
Accident, gunshot	2	Epilepsy	2	Lungs, œdema of	1
Accident, suffocation	1	Erysipelas	1	Lungs, paralysis of, following congestion of the brain	1
Accident, C.B.&Q.RR.	1	Exhaustion	1		
Anæmia	1	Exposure	1		
Angina	1	Endometritis	1	Malformation	1
Apoplexy	6	Fever, intermittent	1	Measles	21
Atelectasis, pulmenium	1	Fever, puerperal	3	Measles, following the Meningitis	1
Bowels, inflammation	5	Fever, puerperal and brondirlis	1		5
Brain, congestion of	3	Fever, remittent	1	Meningitis, cerebro-spinal	4
Brain, disease of	2	Fever, scarlet	7	Meningitis, tuberculous	4
Brain, effusion,	1	Fever, typhoid	10	Nephritis	2
Brain, inflammation	3	Fever, typhoid with spinal fistula	1	Œdema glottitis	1
Brain, softening of,	1	Fever, typhus	2	Old Age	8
Births, still & prematu.	45	Fungus hemadotes	1	Paralysis	2
Bright's disease	2	Gangrene	1	Peritonitis	5
Bronchitis	7	Gastritis	1	Pericarditis	1
Bronchitis, capillary	1	Gastritis, chronic	1	Phthisis pulmonalisis	42
Bronchitis, vessecular,	1	Gastrœntrites	1	Pleurisy	2
Cancer	1	Hemorrhage, umbilical	1	Pneumonia	20
Cancer, of face	1	Heart, disease of	3	Pneumonia, broncho	1
Cancer, of intestines	1	Heart, fatty degenera.	1	Pneumonia, pleuro	2
Cancer, of stomach	2	Heart, organic disease	1	Pneumonia, typhoid	2
Cancer, of uterus	3	Heart, volvular disease	2	Pneumonia, following Measles	3
Cholera infantum	1	Hypertrophy of heart	2	Pyemia	1
Convulsions	42	Hemiplegia	1	Rheumatism	1
Convulsions, puerperal with sanguineous effusion	1	Hepatitis	2	Scrofula	1
		Hydrocephalus	3	Small-pox	35
Croup	9	Hydrocephalus, acute	3	Suicide	2
Croup, membranous	2	Hydrocephalus, chronic	1	Stomach, inflammation	1
Debility	5	Inanition	1	Tabes mesenterica	4
Delirium tremens	3	Indigestion	1	Teething	1
Deficient vitality	1	Kidneys, disease of	1	Uræmia	1
Diarrhœa	4	Kidneys, inflammation	1	Varioloid	2
Diphtheria	4	Laryngitis	1	Whooping-cough	1
Dropsy	2	Laryngitis, chronic	1		
Dysentery, following Measles	1	Liver, atrophy of	1	Total	379

Deaths in March 1868, 379 | Deaths in March 1867, 280 | Increase, 99

Deaths in February, 1868, 423 | Decrease, 44

AGES.

Under 5	190	40 to 50	22	90 to 100	0
5 to 10	31	50 to 60	18	100 to 110	0
10 to 20	16	60 to 70	10	Unknown	0
20 to 30	39	70 to 80	13		
30 to 40	38	80 to 90	2	Total	379

Males, 203 | Females, 176 | Total, 379

Single, 278 | Married, 101 | Total, 379

White, 373 | Colored, 6 | Total, 379

NATIVITY.

Chicago	175	Holland	3	Prussia	4
Other parts U. S.	73	Ireland	37	Scotland	2
Bohemia	1	Island of Jamaica	1	Sweden	1
Canada	4	Norway	7	Unknown	2
England	14	New Brunswick	1		
Germany	54			Total	379

DEATHS BY SMALL-POX.

For the Month of March, 1868.

2d Ward	2	12th Ward	2
3d Ward	3	14th Ward	1
4th Ward	1	15th Ward	3
5th Ward	8	Lake Hospital	7
7th Ward	4	Unknown	1
8th Ward	1		
11th Ward	2	Total,	35

Varioloid, 14 Ward, 2

MORTALITY BY WARDS FOR THE MONTH.

Ward.	Mortality.	Pop. in 1866.	One death in		Ward.	Mortality.	Pop. in 1866.	One death in	
1	7	9,668	1,381	3-7	14	17	12,108	712	1-4
2	15	12,985	865	2-3	15	38	15,766	414	9-10
3	24	15,738	655	3-4	16	33	14,912	451	7-8
4	30	10,884	362	4-5	County hosp.	5			
5	24	9,610	400	5-12	HosWom.Chi.	0			
6	24	10,680	440	4-5	Soldier's Ho.	1			
7	30	18,755	625	1-6	Home of the Friendl's,	0			
8	23	10,429	453	10-23	Marine hos.,	1			
9	12	13,940	1 161	2-3	Mercy hos.,	5			
10	17	11,416	671	1-2	St.Luke's hos.	0			
11	30	12,924	430	4-5	St.Jose. asyl.	3			
12	18	12,695	705	1-4	Lake Hosp.,	7			
13	14	8,188	584	6-7					

Total, 379

The Report was ordered placed on file.

Commissioner Reynolds, from the committee on appointments, recommended the appointment, as sanitary police inspectors, of H. N. Alexander and James E. Newland. The report was adopted, and the appointments made.

The Board then adjourned until 10 o'clock on Monday, when the report of expenditures and the annual mortality report will be rendered.

Illinois State Medical Society.—The next Annual Meeting of the Illinois State Medical Society will be held in the City of *Quincy*, commencing on the *Third Tuesday* in May, 1868. It is very desirable that the profession throughout the Stateshould be well represented.

N. S. DAVIS,

March 26th, 1868. *Permanent Sec'y.*

Influence of Alpine Climates on Pulmonary Consumption.—Some startling cases are related, showing the beneficial influence of Alpine climates on pulmonary consumption. One patient lost his cough and gained flesh on the Peruvian Andes, and, after a subsequent relapse at New Orleans, entirely recovered his health on the table-land of Mexico. A second patient, after spending a winter at Bordeaux and Cannes without entirely losing his cough, and where he still continued to lose weight, went to the Righi, in Switzerland, where he lived almost entirely in the open air and drank about two quarts of milk a-day. He recovered his health perfectly, so far as his own sensations went. The third case went to Davos am Platz, and recovered. The treatment adopted there by Drs. Spengler and Unger, is the use of much milk and light nourishing food; a moderate amount of wine, principally the red wine of the Valteline; and graduated exercise, first on level, later up hill. The cold douche is likewise, in many cases, used with advantage. It is probable that in addition to the exhilaration and increased inclination to exercise produced by the cooling, refreshing atmosphere and the complete change in the manner of living, that the increased exercise of the respiratory organs, the fuller, deeper inspirations necessitated by the rarity of the atmosphere influences the respiratory circulation and all the processes of nutrition.—[Dr. H. Weber.]—*Braithwaite's Ret.*

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CHICAGO MEDICAL COLLEGE.

The regular Annual Lecture Term in this Institution will commence on the first Monday in October, and continue until the first Tuesday in March following. Clinical Lectures *daily* throughout the term.

FACULTY.

N. S. DAVIS, M.D., Professor of Principles and Practice of Medicine, and of Clinical Medicine.

W. H. BYFORD, M.D., Professor of Obstetrics and Diseases of Women and Children.

EDMUND ANDREWS, M.D., Professor of Principles and Practice of Surgery, and of Military Surgery.

JOHN E. DAVIES, A.M., Lecturer on Organic Chemistry and Toxicology.

H. A. JOHNSON, M.D., Professor of Diseases of the Chest.

J. S. JEWELL, M.D., Professor of Descriptive Anatomy.

J. H. HOLLISTER, M.D., Prof. of Gen. Pathology and Public Hygiene.

RALPH N. ISHAM, M.D., Professor of Surgical Anatomy and Operations of Surgery.

M. O. HEYDOCK, M.D., Professor of Materia Medica and Therapeutics.

JOHN E. DAVIES, A.M., Lecturer on Inorganic Chemistry.

R. J. PATTERSON, M D., Professor of Medical Jurisprudence.

DANIEL J. NELSON, M.D., Professor of Physiology and Histology.

J. M. WOODWORTH, M.D., Demonstrator of Anatomy.

E. O. F. ROLLER, M.D., Assistant to the Professor of Obstetrics.

S. A. McWILLIAMS, M.D., Assistant to the Professor of Anatomy.

For the Winter Term, admitting to all the Lectures in the College, ... $50.00
Graduation Fee, ... .00
Matriculation Fee, ... 5.00
Dissecting Ticket, ... 5.00
Hospital Ticket, ... 6.00

The Summer Reading and Clinical Term commences on the second Tuesday in March, and continues until the first Tuesday in July; and is free to all matriculated Studens of the College. Boarding, $3.50 to $4.50 per week. For further information, address

E. ANDREWS, *Sec'y of the Faculty.*

THE

CHICAGO MEDICAL EXAMINER.

N. S. DAVIS, M.D., Editor.

VOL. IX. JUNE, 1868. NO. 6.

Original Contributions.

ARTICLE XVIII.

CALCAREOUS DEGENERATION OF THE PERICARDIUM.

By CURTIS F. FENN, M.D., Chicago.

The following history was read in the Chicago Medical Society, and, by request of the Society, is sent to the Examiner:

James Owens, a laborer, 65 years old, born in Ireland, was admitted to the County Hospital Dec. 19th, 1867. His complexion was sallow; eyes dark, with well-marked arcus senilis; his feet and legs were œdematous and cyanotic; body emaciated; and remaining teeth worn and free from decay.

After being carried to his bed, he assumed a semi-recumbent posture, keeping his left side a little raised. His circulation was always excitable, irregular, intermittent, and feeble; the radial pulse was felt with difficulty, owing to what seemed to be an obstruction in the walls of the artery. The apex beat of the heart was perceptible an inch to the left of the normal place; but there was a total want of rythm and a sense of distance in the sound; no friction sounds or murmurs were detected. Respiration was irregular, sighing, and imperfect, especially at night. His mental faculties were disturbed, passive delirium being generally manifest; his words were always incoherent, articulated in a mumbling way, so that rarely a

word was intelligible. No paralysis was detected; he seemed often to have pain in his head; the pupil was contracted; the tongue was dry, brown, trembling, and pointed; appetite feeble; bowels constipated; urine normal in quantity, transparent, specific gravity 1012, reaction slightly acid, containing albumen which, when coagulated, formed a deposit equal to one-fourth the whole volume. Nothing reliable was learned of his antecedent history, except the statement of his daughter, that he had once had rheumatism.

He was put upon a-half ounce of gin, fifteen drops of tincture of chloride of iron, and five grains of iodide of potassium, three times daily. No amelioration of any of the symptoms followed. The patient died Feb. 2d, 1868.

Autopsy, Forty-Eight Hours after Death.

Emaciation was marked; the lungs were full of dark blood; some old adhesions of the right pleura existed, and the middle lobe of the right lung was hepatized. The coverings of the heart *in situ* appeared normal, until an attempt was made to cut into the pericardium; within its tissue was found an extensive deposit of calcareous matter which covered the whole anterior face of the heart and about half the posterior. It spread out like a shell, being thickest where the pericardium unites with the central tendon of the diaphragm, and gradually becoming thinner as it extended upward from the base in two parts, resembling the bivalve of an oyster, the distance of four and a-half inches anteriorly and three and a-half posteriorly. The deposit was deficient over the upper part of the left margin of the heart and extended to the right, a little beyond the ventricular septum.

A firm adhesion existed between the apex of the heart and base of the sack. This was severed, and the heart removed without injury to the shell. It maintained then the shape of a cup, somewhat irregular in outline, but capable of holding half a pint. The inner surface of the pericardium was roughened in spots by the concretion, otherwise both surfaces were smooth; the heart was enlarged and softened and covered with a pearly deposit of plastic lymph; the right auricle and ventricle were

filled with coagulum and dilated; the tricuspid and mitral valves were a little thickened, but pliable; the aortic semilunar valves were calcified along their free border, but not impaired as to their sufficiency; the arch of the aorta, about the opening of the left subclavian, presented a roughened and calcified surface a square inch in area; plastic deposits appeared along the inner surface of the thoracic aorta. The liver was enlarged and indurated, as if from chronic inflammation of the capsule; the gall-bladder distended with black fluid. The kidneys were both atrophied to about one-third their normal volume; the pyramids and cortical substance appeared blended, and contained cysts varying in size from that of a hazel-nut to that of a pin-head. On the surface of one was a cicatrix, as if a cyst had been ruptured and healed. An examination of the brain showed a deposit of serum within the subarachnoidian space, but no lymph and no adhesions. There was calcareous degeneration of the internal carotid and vertebral arteries, and the branches forming the circle of Willis. The walls of the ophthalmic arteries were also hardened and their calibre diminished by the same foreign deposits. These degenerate arteries were not saved. The heart, pericardium, and arch of the aorta are preserved in the County Hospital Museum.

ARTICLE XIX.

MEDICAL EDUCATION.—AN ADDRESS DELIVERED BEFORE THE ALUMNI ASSOCIATION OF CHICAGO MEDICAL COLLEGE.

By J. S. JEWELL, M.D., of Chicago, Pres't of the Association.

Delivered at the Annual Meeting of the Association, held at Chicago Medical College, March 3d, 1868.

Gentlemen of the Alumni Association of Chicago Medical College:

The institution of which we are members, has just closed the ninth year of its existence. Beginning under external circum-

stances not the most auspicious, it has passed evenly and steadily along, to the surprise, even of many of its friends, not to mention those who looked upon it, if not with enmity, yet as a spasmodic or Utopian scheme. In spite of adverse circumstances, unfriendly and often unbecoming criticisms, it has, from the first, enjoyed a real, healthy growth, and to-day has an acknowledged and a permanent place among the institutions of our city and country; one, *we* may be permitted to say, in which is found only cause for congratulation. From a beginning without means, it has advanced to a position where its foundation has been, we trust, enduringly laid. To whatever other causes this success has been due (and there *are* other causes), it is in great measure due to the men who first founded it, to give practical form to their well-grounded views in relation to medical education, and to which practical effort they have consecrated no small portion of their time, means, and influence, without any corresponding material equivalent as a return. To no one of that number can these remarks be so fully applied as to the worthy and respected *President* of our *Alma Mater.*

By many of us was it thought to be a fitting time to call the children, who have been scattered abroad, back to the old family ground, for mutual advice, encouragement, and congratulation. With nine years of our institution committed to history; with a band of faithful and generous alumni; and with the prospect and determination, if practicable, of taking new and important steps in relation to medical education; and in view of the necessity of harmony of purpose and effort, so far as the alumni are concerned, you have been called together. We had hoped to have seen a greater number present from the classes of former years; but to such as are with us, and to the new members, in behalf of the faculty, trustees, and resident alumni, I extend you a welcome, which lacks language corresponding to its cordiality.

This coming together is not for purposes of self-glorification, though we may in all propriety congratulate each other and the institution, on the success it has achieved. It is rather for the

purpose, as I view it, of renewing old and forming new associations; rekindling our zeal; perfecting our organization, in view of its ends; and of considering, at this juncture, what are the present relations of the institution, in the welfare of which we have so deep an interest—to the profession and medical education—and what should or will be its policy in the future, and in what way, if any, we, as its members, may aid its efforts in the worthy cause to which it is committed. Never, in its history, could a meeting of its graduates and friends, with such purposes, take place with more propriety.

Then, in the *first* place, it is only necessary to remind you, I hope, how much an institution, especially one like this, is dependent on its graduates. They are its living, acting, practical testimonies; epistles known and read of all men. If we are progressive, liberal, and practical in spirit, comparatively accurate and extensive in professional learning, and faithful in the discharge of professional and other duties, the result cannot but be to reflect honor back on the institution from which we have issued. Conversely, if we display opposite qualities, the institution, by an inevitable consequence, shares our failure or disgrace. Thus, in some important respects, our interests are *one*—the relations reciprocal. You know not with what pleasure and satisfaction the institution, represented in its faculty, looks out after those it has fostered and upon whom it has set the seal of its approbation. How they watch with a just pride their good deeds, and with what pain they learn of any act inconsistent with a true manhood. They cannot but feel anxious, since the responsibility is recognized and accepted, which rests on them, in sending out members to assume responsible places in the communities of our land.

The impressions of various kinds made on the mind of the student, while passing through the prescribed course, cannot be devoid of influence on his subsequent professional career. He will have, as a general thing, a broad, manly, and liberal, or a narrow, low, and sordid view of his profession; much in accordance with the spell cast about him by the institution to the guidance of which he has committed himself. These interdepend-

ent relations should never be forgotten, and I hope they are remembered by all congregated here to-day.

In the *second* place, let us not forget the relations our institution sustains to medical education and the profession in this country, *to-day*, not less than through its entire history. That we may understand the relation just mentioned, let us glance briefly at its two terms. But *first*, the *state of medical education* in general, and the *needs* of the profession.

Some of you will be surprised to learn, that just one hundred years ago, almost to a day, the first medical school was established in this country. This was in 1768, in the city of Philadelphia, and *now we* meet *here* on the threshold of a new century! That school and others, called into existence sooner or later, were evidently intended to meet, temporarily, an emergency felt in a new country. It does not seem to have entered the thought of these pioneers in medical education that their primitive schools were adequate to the *real* wants of the profession. Men *still* returned to the *old* world, to acquire what the imperfect schools of the *new* could not afford. But so pressing were the needs of the new communities, and so great the corresponding inducements to enter practice, that, in connexion with the difficulty and expense of visiting the old world, it soon came to pass that the profession, as a whole, had only such attainments as the imperfect home schools could afford. The practical character of a people devoted, necessarily, at that early period, to the development of the material resources of the country, was soon communicated to the profession, with the effect to render men careful only of securing a mere practical acquaintance with the simple diseases prevalent in the early settlements. Then, the absence of the legal restrictions which, from time immemorial, were in force in the old world, by which communities were in some measure protected from quacks and pretenders, permitted all persons whom inclination, a sordid interest, or accident led to practice, to do so without let or hindrance. This opening the professional arena to a host of incompetent and quackish persons; this practical obliteration of all well-marked distinctions in the popular mind, or even in the

profession, between incompetent professionals and the educated physician was striven against, but with indifferent success. Those who took this stand, gradually abandoned the unequal contest and soon came to tolerate, if not to fall in with, the adverse tide. The final result was, a majority of the practicing physicians in the country had never beheld the inside of a medical college, even such as the country afforded, and among the remainder, the majority had attended but one course of lectures before becoming involved in the *toils* of practice; while the few only, as rare exceptions, had a diploma from an indigenous college. The rarest professional phenomenon was to see, or even *hear* of a man who had graduated at one of the renowned schools of the old world. This state of things, true to the letter, led to several results. Among them, we notice:

1. A miserably low standard of attainment among those popularly accounted as members of the profession. The result, in fact, was to abolish *any* valid standard for comparison and judgment.

2. A continuance, as a permanent system, with occasional unimportant changes for better or worse, of the temporary scheme adopted in the beginning, in relation to *course*, *time*, and *range* of study in the medical colleges.

3. A most overwhelming admiration for the *men*, *institutions*, and *books* of the old world. This latter is, even now, only *beginning* to reäct to something like just proportions. These, in brief, were the main results reached almost a century ago.

The one hundred years which have elapsed since the establishment of the first medical college, have witnessed achievements in this fair land of a development and progress in the material, scientific, educational, moral, and religious aspects of life, such as must be, and is, matter for unfeigned astonishment to every reflecting mind. Everywhere, forgetting the things that are behind, has marked progress been made toward practical perfection. But one exception, however, must be made to this statement, and *only* one. It relates to our profession. We do not make this as a general statement. We do not refer to the progress of medical knowledge, because that has kept

pace at least with other progressive forms of knowledge. Neither do we refer to the state of the *professional mind* as to progress in medical education, because there has been decided advance in this respect. While all forms of science, and especially those tributary to medicine, have been widening their fields and multiplying their objects an hundred fold, medical schools have, almost without an exception, stood *absolutely still.* Generally speaking, they have revolved within the same limits and on much the same ground they did *one hundred* years ago. There has been no advance, in any sense, corresponding to what has been observed in other departments of education, or commensurate with the growing state of medicine. This has not existed because the profession was unaware of it, or had not protested against it. Protestations were often made, and the more so as time passed on. There has been a progressively increasing demand on the colleges for higher education; but the demand, practically speaking, has been unheeded. But what *has* been actually the practice of the schools in this matter, and what *is* the practice *now?* It is so well known as almost to weary one to hear it stated. The colleges have almost uniformly laid down two courses of four calendar months each, or sixteen weeks; in all, something like three years is supposed to be spent in study before taking a degree. It is really amazing to look over the details of the curriculum and see how much must be crowded in the brief space of three years. But in some cases, there has been ever a letting down from the positions assumed just one hundred years ago. The candidate was *then* obliged, as he is not now, to submit to examinations in *latin* and *mathematics*, and present and defend a *latin thesis*, besides pursuing and submitting to examinations in all medical subjects, properly so-called.

Though there has been such a rapid extension of the domain of medicine, there has been no corresponding extension of college terms. As they were one hundred years ago, so are they, generally speaking, now. This remarkable brevity in number and length of college terms is not compensated for by any extended and accurate preliminary culture, as a rule, in attaining

which, valuable habits of study are formed and acquirements made. As often as any other way, students come from the farm, or some other sphere in which they seldom possess any of the above prerequisites. But, perhaps, these defects in the system are counterbalanced by the adoption of a happy logical order among the various studies, so as to economize the time? It would surprise any *disinterested* but intelligent observer to be told, as he must be in truth, that faulty as the system is in other respects, it is most so here. There has been, as a *rule*, no kind of attention paid to a logical order among the various branches taught. *Order* is said to be the *first* law of heaven. I do not know about that; but this I *do* know, it is likely to prove the *last* in medical college instruction. This cannot be set aside, as of small consequence. Everywhere else, in all kinds of business, in learning all other professions, in all other forms of teaching or education a *progressive order* is considered, and justly so, as an indispensable, almost a *paramount* feature. But in medicine, instead of *this*, its various branches have generally been presented in the veriest medley. We cannot plead that medical is an exception to other kinds of teaching; neither can we plead custom, or authority, or respectability, such subterfuges will not do. It will be no offset to this to say, our institutions have turned out men who have become eminent. This is but the transparent logical fallacy of "*post hoc, ergo propter hoc.*"

It is a mortifying, indisputable fact that, in this respect, the medical colleges in this country are behind the times. There is but one course open which should be entertained. That is, enlightened, liberal *reform*. This should be pushed, in spite of the harmless sneers of a halting conservatism. The time *has* been, when it was best to *wait* and consider, *perhaps*, but that time has passed. There is no longer any valid excuse for delay. But what effect on the profession and on the progress of medicine has this unfortunate attitude of the colleges exerted? As to the former, certainly not good. No one will contend but if the colleges had exacted three terms instead of two, of six months each instead of four, medical men, as a whole,

would have been better educated. No one will contend that the colleges have no responsibility in this matter. As water will not rise above its fountain head, neither will the profession, as a *body*, transcend its fountains of instruction and intelligence. This is true, if there is any force in personal influence and example in the affairs of men. As to the latter—the progress of medicine—the same may be said. It savors of a *truism*, to say that medicine would have been advanced more than it has been, if the profession had been more learned, capable, and enthusiastic, as it would have been under a different course of instruction. These effects on the profession and the progress of medicine, have not been passing unperceived. Whenever the profession has been brought to reflect, as it often has, and when the opportunity has been offered for expression, almost invariably the call has been for higher education. The reports of societies and medical journals have often been fairly burdened with unmistakable expressions, that the colleges must adopt a more elevated and rational system of instruction. It is almost painful to think in what estimation our system is held abroad. To our complacent, minutely furnished, and highly favored brethren in Europe, we are little better than gentiles or barbarians, in a *scientific* point of view. Every one knows how lightly the title of doctor is held in popular esteem in this country, and how narrow, for reasons at once obvious, is the line between quacks and the regular profession. Is it any wonder to the *frank* and intelligent outsider, that mistakes should be made by the people as to where that line is, if it exists? Having glanced briefly at the relations of medical colleges in *general* in this country to medical education, let us notice, in a few words, what are and have been, from its beginning, the relations of this institution to the same.

The establishment of this school took place under the conviction, in the minds of its founders, that there was no longer any excuse for not making *some* change in the right direction. While the true conception required to satisfy it a sweeping and radical reform, yet the practical difficulties in the way of the enterprise made it necessary to *lower* the conception for

the time, without, however, losing sight of it. The three features of importance the design included, were:

1. To lengthen the term to five instead of four months.

2. Multiply the chairs, by dividing some of the leading ones, as anatomy, chemistry, surgery, practical medicine, etc., that each teacher might have a narrower field, and more time thoroughly to occupy it; and the *student* more time and less confusion for *study*.

3. To arrange the various branches embraced in the curriculum, so that the most primary, as determined by the real wants of the student, should come first, while others should follow in a strictly natural or logical order; so that the studies of *this* day, week, or session would not be alone for themselves, but *preparatory* to ulterior studies, and so on to the end of the curriculum. The student was to be restrained from entering on that part of his course to-day, which, to be comprehended, would remand him to-morrow to some prior study he had neglected, or, worse still, which it had been *arranged* to lead him into at some subsequent period.

You are all familiar with the division of studies and course, in conformity with the above, which has, from the beginning, prevailed in this school. While it was felt that the *final* step could not be taken; that the contemplated change must be gradual; yet that the extension of time from four to five months, and the division of the chairs adopted, and the attempt to systematize the course were important advances in a normal direction, none will deny. The ground at first taken has not since been abandoned. So far from any disposition to this being manifested, the faculty, or various members of it, have informally had under consideration various schemes for attaining higher ground in relation to medical education. Time passed on, and it began to be known that a medical college planted on these principles could be sustained, and was actually receiving sympathy and encouragement from the profession, so far as it became known.

At each meeting of the American Medical Association, medical education received thoughtful attention, until at last, at

the meeting of 1866, held in Baltimore, it culminated in the appointment of a committee, which was empowered to call a convention of colleges, to consider the whole matter of medical college instruction, with a view to reform. In obedience to the call of the committee, a convention assembled at Cincinnati, beginning on the 3d of May, 1867, Prof. Alfred Stillé, of Philadelphia, presiding. That convention continued its sessions for three days, and was made up of delegates from most of the prominent colleges in the United States. *This* institution was worthily represented by Professors Davis and Byford. On the first day of the convention, the former presented propositions for its action, and, during its continuance, ably supported them. The meeting seems to have been conspicuous for its harmony and good feeling, and the propositions were thoroughly, earnestly, and temperately discussed. The final result, was the adoption of the propositions at first submitted, without any fundamental change, and without a dissenting voice. They read, omitting the last of the series, as follows:

"*Resolved:*

"1st. That every student applying for matriculation in a Medical College, shall be required to show, either by satisfactory certificate, or by a direct examination by a Committee of the Faculty, that he possesses a thorough knowledge of the common English branches of education, including the first series of mathematics, the elements of natural sciences, and a sufficient knowledge of Latin and Greek to understand the technical terms of the profession; and that the certificate presented, or the result of the examinations thus required, be regularly filed as a part of the records of each Medical College.

"2d. That every Medical Student shall be required to study four full years, including three regular annual courses of Medical College instruction, before being admitted to an examination for the degree of Doctor of Medicine.

"3d. That the minimum duration of a regular annual lecture term, or course of Medical College instruction, shall be six calendar months.

"4th. That every Medical College shall embrace in its curriculum the following branches, to be taught by not less than nine Professors, namely: Descriptive anatomy, including dissections; physiology and histology; inorganic chemistry, mate-

ria medica, organic chemistry, and toxicology; general pathology, therapeutics, pathological anatomy, and public hygiene; surgical anatomy and operations of surgery; medical jurisprudence and medical ethics; practice of medicine, practice of surgery, obstetrics, and diseases of women and children; clinical medicine and clinical surgery. And that these several branches shall be divided into three groups or series, corresponding with the three courses of Medical College instruction required.

"The first, or *Freshman Series*, shall embrace descriptive anatomy and practical dissections; physiology and histology; inorganic chemistry and materia medica. To these, the attention of the student shall be mainly restricted during his first course of Medical College instruction, and in these he shall submit to a thorough examination, by the proper members of the Faculty, at its close, and receive a certificate indicating the degree of his progress.

"The second, or *Junior Series*, shall embrace organic chemistry and toxicology; general pathology, pathological anatomy, therapeutics, and public hygiene; surgical anatomy and operations of surgery; medical jurisprudence and medical ethics. To these the attention of the medical student shall be directed during his second course of Medical College instruction, and in them he shall be examined, at the close of his second course, in the same manner as after the first.

"The third, or *Senior Series*, shall embrace practical medicine; practical surgery; obstetrics, and diseases peculiar to women and children; with clinical medicine and clinical surgery in a hospital. These shall occupy the attention of the student during his third course of College instruction, and at its close he shall be eligible to a general examination for the degree of Doctor of Medicine.

"The instruction in the three series is to be given simultaneously, and to continue throughout the whole of each annual College term; each student attending the lectures on such branches as belong to his period of progress in study, in the same manner as the sophomore, junior, and senior classes, each pursue their studies simultaneously throughout the collegiate year, in all our Literary Colleges.

"5th. That every Medical College should immediately adopt some effectual method of ascertaining the actual attendance of students, upon its lectures and other exercises, and at the close of each session, of the attendance of the student, a certificate, specifying the time and the courses of instruction actually

attended, should be given, and such certificate only should be received by other Colleges as evidence of such attendance."

Immediately following the convention, the American Medical Association convened on the 7th, at the same place, and on the second day Dr. Sayre, of New York, offered the following:

"*Resolved*, That this Association, most heartily approving the whole action of the Convention of Medical Colleges, *urge its practical adoption on* ALL the Medical Colleges in the country."

This resolution was adopted. It will be observed by you all, that the course, finally agreed on in the Convention and approved by the Association, differs only in *measure*, not in *kind*, from that adopted in this College from the beginning, and which has been urged for years past, on all occasions, by the worthy President of this faculty, to whose action, more than that of any single man, the movement now under consideration may be fairly attributed.

It is on the eve of this grand advance determined on among the colleges, and upon which the profession has set the seal of its approbation, and which is to open the new century dawning on American medical colleges; it is to catch the spirit and feel the spell of this medical college centennary; to approve and urge, in our proper capacity, the adoption of the propositions agreed on; to exchange congratulations; renew old associations and form new; rekindle our zeal, and consecrate ourselves anew and intelligently to the best interests of the profession; it is for *such* purposes we have come together to-day. To these calls may we all respond. Let us not leave here, faltering as to our personal duty, however humble, nor devoid of hope or interest in this cause. Let us try and be worthy of, and display a truly filial affection for, our Alma Mater, acquitting ourselves in whatever sphere as men, and ever ready to come up and lend what assistance and encouragement we may in forwarding the noble cause our Institution is so honorably identified with.

ARTICLE XIX.

SMALL THINGS IN SURGERY.

BY E. ANDREWS, M.D., Prof. of Principles and Practice of Surgery, Chicago Medical College.

It often happens that little matters in surgical practice are less readily managed by the practitioner than great ones, and that hints on such points are extremely useful. The following remarks are offered, in the hope that they may be practically advantageous to the reader:

To Remove a Ligature which is Slow in Coming Away from a Vessel.—Cut a smooth, round stick or piece of bougie long enough to rest across the wound. Tie the end of the ligature to the middle of the stick, or, if the thread is not long enough, tie another piece to the end of it. Turn the stick around like the handle of a gimlet, till the thread is twisted tight; and let it be turned a little more two or three times a-day. This will soon bring the ligature away.

To Tap the Abdomen without a Trochar.—If the surgeon finds himself called upon to perform paracentesis abdominis, and has not his trochar at hand, he may accomplish it perfectly by taking a scalpel or lancet and puncturing the linea alba, and then inserting a clean catheter. If there is no catheter at hand, a smooth wire bent in the form of a staple may be used, pushing the folded end into the wound and then turning it across the incision to keep it open. If the scalpel or lancet is sharp, care must be exercised not to thrust it too deeply.

To Place a Seton in a Hydrocele with but One Puncture.—Insert a trochar and withdraw the stilette; then, with a probe, thrust a tape through the tube in folds, coiling them up in the sac, in the manner recommended by Prof. Byford for certain uterine tumors; then withdraw the canula, leaving one end of the tape hanging from the wound. If no trochar is at hand, make a free incision into the sac and thrust in the tape by the side of the knife before withdrawing the blade.

To Reduce a Hernia without the ordinary Taxis.—The European surgeons are practising such reductions by winding layer after layer of elastic bandage upon the scrotum, until the tension of the rubber forces the gut back into the abdomen. These bandages are sold by Degenhardt and Bliss & Sharp, of this city.

Caution in Extirpation of Piles.—There is hardly any operation in surgery so certain of success, and at the same time so useful, as the removal of hemorrhoids, whether by the ligature, the ecraseur, or the ecraseur-forceps. One necessary precaution is, however, left without mention by many of the books. When piles occupy nearly the whole verge of the anus, they should not be severed close to their bases, because the contraction of the cicatrix induces stricture of the anus. It is sufficient if they are removed at a point about half way between their bases and their summits; the contraction of the scars causes the stumps to atrophy, and at the same time leaves integument enough to form a free verge to the anus.

The Ecraseur-Forceps in the Removal of Tumors.—In a former number of the EXAMINER I gave a figure and description of this instrument, which I had devised as a substitute for the chain ecraseur. I have recently applied it not only to hemorrhoids, but to the removal of cancer of the tongue. The facility with which a portion of the tongue may be removed by it without troublesome hemorrhage is very gratifying. It is equally applicable to almost all other cases where the chain ecraseur has usually been required.

Substitute for Bullet Forceps.—The small instrument shaped like polypus forceps in the pocket-cases makes an excellent bullet forceps for many pistol wounds. Those of them which have good points can be used to bite out a chip of lead, and thus enable the surgeon to distinguish a fractured bone from the bullet.

Probe for Detecting Bullets.—If a piece of the stem of a clay pipe be slipped upon the end of a probe, which has been filed down for the purpose, and then smoothed with the file, it forms a more delicate test of lead than the famous Nélaton's probe,

which was used on Garibaldi. It is introduced until it touches the suspected object, and then is twirled around in contact with it. If it touched lead, the trace of it will be found upon the clay. This probe was invented by an army surgeon in Wisconsin, whose name I have forgotten.

DEATH FROM CHLOROFORM.

By B. F. BROWN, M.D., Oneida, Knox Co., Ill.

Mrs. Elizabeth Hammon, aged 35, mother of three children, apparently a healthy woman, went to a dentist (Dr. McDowell) April 16, 1868, for the purpose of having some teeth extracted. Thinking she could not endure the pain, she requested the Doctor to administer chloroform; and, as he had given it to her once before (about six months since) without any bad effect, he consented to administer it again, and pouring about two drachms of chloroform upon a sponge, held it a short distance from her face. After she had made three or four inspirations her respiration ceased; he felt for the pulse and found she had none. Artificial respiration was commenced at once, and stimulating applications applied over the heart and to the extremities, but to no effect. She made but two or three efforts at inspiration after he first noticed something was wrong. An autopsy could not be obtained.

Clinical Reports.

FROM THE SERVICE OF PROF. N. S. DAVIS,

In Medical Wards of Mercy Hospital.

EPILEPSY.—From Notes by —. Barstow. *April 8, 1868.*

Gentlemen:—The patient before you is a woman aged 45 years; the mother of several children. The countenance has a slight expression of sadness, coupled with sufficient

paleness to indicate some deficiency of red-corpuscles in the blood, though no marked emaciation. She represents her appetite as fair; her circulation and respiration are undisturbed; and her secretions and excretions are represented as natural. But she has been subject to paroxyms of epilepsy, or falling sickness as it is sometimes called, during the last three years. With her the paroxysm comes suddenly, without any premonitory symptom or peculiar warning. The head begins to swim with dimness of vision, and in a very few seconds, she falls unconscious, in whatever place she may be standing or sitting at the time. The fall is accompanied by general muscular spasms, contorting the features, suppressing respirations, and stiffening the muscles of the trunk and extremities, until the face becomes very turgid and purple from the unoxygenated blood. In a few moments the spasmodic action ceases, the respirations are resumed, at first very irregularly with the forcible ejection of saliva often mixed with blood from the biting of the tongue or lips, and afterwards more regular and quiet like one in sleep. This period of quiet or apparent sleep continues from fifteen to thirty minutes, when she awakes with an expression of surprise coupled with a feeling of weariness, but is soon able to go about as usual. She usually has one or two paroxyms each day for two days in succession, and then is exempt from their return for 12 or 14 days. The marks of recent injury which you see on her forehead and nose were produced by falling in one of her paroxysms just before her admission into the hospital some four days since, and these extensive cicatrices on her forearms, were occasioned by her falling upon the hot stove in her family several months ago. The frequent repetition of her paroxysms for three years has perceptibly impaired her mental faculties, including the memory. The failure of the last named faculty is the first to be noticed by the friends of the patient.

She says her family often "*scold* her" for forgetting everything. This case will illustrate one of the most common forms of epilepsy originating in adult life.

Here is a case from another ward in the hospital. It is a man near 40 years of age, who has had epileptic paroxysms

ever since he was 14 years old. You see in his expressionless face and undeveloped forehead, unmistakable evidences of imbecility and impaired cerebral nutrition. Now, when he should be in the vigor of manhood, he is a mere indolent child, caring for nothing but food and tobacco. The nature or pathology of epilepsy is involved in much obscurity. It occurs in both sexes, and at all periods of life, though it more frequently commences in childhood and youth. Its paroxysms exhibit every degree of severity, from mere momentary giddiness and arrest of mental action to the most violent and general convulsions. They may vary from once in one or two years to five or six times per day. The disease affects persons of widely diverse temperaments or physical conditions, and may be excited by a great variety of causes. The latter, however, may be divided into two classes, *viz.*: those that establish the primary seat of irritation in some part of the periphery or sentient extremities of the nervous system, and these that act more directly on the brain or cerebro-spinal nervous centres. Hence many modern writers have divided all cases of epilepsy into two classes: the one called centrifugal or peripheral, and the other centripetal or concentric. To the first class belong such cases as arise from primary irritation in the alimentary canal; in the uterus; in the sexual organs of both sexes, more especially from masturbation and excessive sexual intercourse; and in the wounded or mechanically injured nerves of the extremities or any part of the body. To the second class belong those cases that arise from causes acting directly on the brain or nervous centres; such as mechanical injuries of the brain, depressing mental emotions and passions, alcoholic and other cerebral exhilarants, etc. None of the causes belonging to either of the classes mentioned, are sufficient to induce epilepsy without the preëxistence of a peculiar morbid excitability, of the cerebro-spinal centres favorable to the development of spasmodic paroxysms. This morbid excitability is indeed the only pathological condition that appears common to all cases of epilepsy.

This, with the special physical condition of the patient, and the nature of the exciting cause, must determine the indica-

tions for treatment in each case. To ferret out and remove the exciting cause, more especially in those cases classed as *peripheral*, is a step of primary importance. To expect a cure of the disease by any one of the supposed specific or empirical remedies, while the reflex influence of a dysmenorrhœa, a gastric or intestinal irritation, over-excited genital organs, or an injured nerve, is constantly radiating a morbid impression upon the nervous centres, would be unreasonable. After due attention to all matters of this class, the next step is to regulate the diet, exercise, and mental habits of the patient. In all cases, except such as exhibit evidences of positive impoverishment of the blood and tissues, I think it important to exclude meat altogether as an article of food. Milk, farinaceous articles, tuberous roots, and fruits may be taken freely. In all cases, all kinds of fermented or distilled spirits, together with *strong* tea and coffee should be rigidly avoided. It is more safe to wholly exclude tobacco also. Moderate daily exercise in the open air, and if possible some congenial regular mental occupation is important.

Without careful and persistent attention to these hygienic regulations, the most appropriate administration of medicines will fail to produce any permanent effect in the cure of epilepsy. To aid in overcoming the morbidly excitable condition of the nervous centres, we probably have no remedies more reliable than the bromides of potassium and ammonia, aided in some cases by gelsemin and in others by belladonna.

For the immediate relief of a convulsive paroxysm the bromide of potassium should be given in doses of 20 grs., or 30 grs. combined with 10 or 12 gtts. of tinct. belladonna, and repeated every two hours until the paroxysms cease. But for more permanent effect it should be continued steadily for a long period of time in doses of ten grains morning and noon, and fifteen grains at bedtime. The sedative influence in cerebral excitability will be increased by adding to each dose eight drops of tincture of gelsmium; or if there appears to be much tendency to vascular fulness of the cerebro-spinal centres the same quantity of tincture of belladonna may be substituted for

the gelsmium. The female patient to which we have just directed your attention, affords nothing in her history calculated to explain the cause of her disease, except the fact that for a little time before the occurrence of the first paroxysm she had been separated from some of her relations and yielded to an inordinate degree of grief and despondency. Since her admission into the hospital she has taken 10 grs. of bromide of potassium before each meal and at bedtime, and has had no recurrence of the paroxysms, since the first twelve hours after her admission. We shall continue the same treatment, and as she is somewhat anemic we shall give her in addition one teaspoonful of the syrup of pyrophosphate of iron after breakfast and dinner each day. Before leaving this case, I cannot impress upon you too strongly the necessity of long continued perseverance in the treatment of epileptic cases. The patient and friends should be informed at once that no treatment will have any prospect of permanent success that is not continued faithfully, in all its details, for from six to eighteen months.

Proceedings of Societies.

CHICAGO MEDICAL SOCIETY.

Friday Evening, April 17, 1868.

The Society was called to order by the President, and the minutes of the previous meeting read and approved.

Dr. Loverin reported favorably on the application of Dr. T. S. Bidwell, when he was balloted for and duly elected a member of the Society.

Dr. Bogue presented his report on the sanitary condition of the North Division of the city, for three months, commencing January 1, 1868.

On motion of Dr. Loverin, the report of Dr. Bogue was accepted.

Dr. Mitchell exhibited to the Society a fibrous polypus of

the uterus. After removal of the tumor the hemorrhage was but slight, the loss of blood being only two drachms. The patient became twice pregnant while the tumor was in the cavity of the uterus.

Dr. Bogue related the case of an Italian who had been stabbed, from which he removed some two and a-half inches of the blade of a heavy dirk, found imbedded between the fourth and fifth dorsal vertebræ. Supposed the injury did not involve the cord, but probably the meninges. Prior to removal, commenced having paralysis. The bladder could not be easily evacuated without pressure over the part; constipation, but not obstinate; had some cough. Patient now able to move about the ward by the use of two canes, and is doing well.

Dr. Lyman reported the results of his examination upon the pathological specimen presented by Dr. Wanzer, at a previous meeting. Found it to be composed of yellow fibrous tissue. Also reported a case of nephritic colic, relieved by the administration of chloroform; found in the urine a calculus, which was exhibited to the Society.

On motion of Dr. Wanzer, the report of Dr. Lyman was accepted and ordered to be placed on file.

Dr. Davis read his report on the sanitary condition of the city, which, on motion of Dr. Loverin, was accepted.

Dr. Miller remarked, he fully accorded with Dr. Davis' report, and expressed his desire to have such portions of the report as related to the sanitary condition published in the daily papers of the city.

Dr. Hatch said that he had seen a number of cases of vaccination, where severe inflammation was the result; was confident it was not owing to the vaccine used, as he was satisfied it was pure and reliable; also accorded with Dr. Davis in his report, and hoped it would be brought before the public.

Dr. Lyman stated that he had also seen the same results as expressed by Dr. Hatch, in a number of instances where the same vaccine had been used, some of which progressed favorably, while others had a severe type of inflammation.

The President reported the result of the vaccination of a lady

and her two children, where the same vaccine had been used; the children terminating well, while the mother, unaccountably, the opposite.

Dr. Davis was of the opinion that, during the past winter, there had been a predisposing tendency to an unhealthy inflammation; thinks it obvious we will have such seasons, and therefore recommends parents to have their children vaccinated during healthy ones.

Dr. Ross said that, in his section of the city, he had seen a larger number of cases of rubeola than usual. Had noticed many cases of vaccination having an inflammatory tendency.

Dr. Mitchell made the following motion, *viz.:* That Dr. Davis be requested to prepare for publication in the public journals, so much of his sanitary report as relates to drainage, and other matters which he deems essential to bring before the public.

Dr. Lyman said, if the report was to be published, it should contain nothing that would cast reflections on the Health Department.

Dr. Trimble fully accorded with Dr. Lyman. Had made a complete survey of his district, and found it in as good condition as could be expected.

Dr. Paoli considered the Board of Health ought to be thankful for the information given, as contained in the report of Dr. Davis, being aware of many streets being in a very filthy condition, more especially Bremer Street.

Dr. Davis said there was no member of the Society that would find less fault with the Board of Health than himself, but he did complain that they had not a more perfect system.

On the motion of Dr. Mitchell being submitted to the Society, it was unanimously carried.

The Society then adjourned.

Friday Evening, April 24, 1868.

The regular meeting of the Chicago Medical Society was called to order by the President. The Secretary then read the proceedings of the last meeting, which were approved and placed on file.

Dr. Wanzer presented a pathological specimen, in form of a fœtus about seven months old. The patient had been flooding for two months previous to delivery, losing each day about the same as during her menstrual period. The true labor pains commenced eight days before delivery. The nates presented, and the fœtus was delivered without rupture of the membranes, the cord being around the neck. The constant discharge which the patient had suffered was ascribed to an attack of measles, leaving her with a severe cough. When called, there was considerable hemorrhage, which ceased soon after delivery. The patient is a strong, robust woman. Had she not have been, the case would probably have resulted unfavorably in this rare case of placenta prævia. Under the use of tinc. ferri chloridi, she is rapidly improving.

Dr. Loverin remarked that it was undoubtedly a case of placenta prævia. Stated that he had a case some years ago; when called, there was severe hemorrhage, which nearly proved fatal.

Dr. Paoli remarked that, in placenta prævia, the object is to deliver before there is hemorrhage, as in nearly all cases the os uteri is well dilated.

Dr. Wickersham cited a case, in the West Division, where hemorrhage proved nearly fatal, while the os uteri was rigid.

Dr. Hildreth reported a case of catarrhal ophthalmia, occurring at the County Hospital. The globe of the eye continued to enlarge, until it was two-thirds the size of a hen's egg and resembled malignant disease. Found slight syphilitic eruption on one hand. The sight of the eye being previously destroyed, an incision was made in the eye, but little serum and blood escaping. The patient was placed upon the following treatment;

℞. Hydrarg. Bichlor.,---------- gr. j
Potassæ Iodidi,---------- ℥iv
Aqua, ---------- ℥viij

M. S., teaspoonful every four hours.

In ten days, the eye had contracted to a small stump, the cornea, lens, and humor having sloughed before the enlargement occurred. Thinks that had the anti-syphilitic remedies been employed early, the eye might have been saved.

Dr. Andrews exhibited an endoscope to the Society, for the diagnosis and treatment of chronic gonorrhœa, which instrument was examined by all present.

Dr. Paoli returned thanks to Dr. Andrews for the privilege of examining the instrument.

Dr. Wickersham mentioned a case of gonorrhœa, occurring from eating grapes, and always returning when that fruit was eaten.

Dr. Wanzer made some inquiries regarding the use of forceps in obstetrical practice, which was participated in by Drs. Loverin and Paoli.

Dr. G. Fredericke was then proposed for membership. The Society then adjourned.

May, 1, 1868.

The regular meeting of the Chicago Medical Society was called to order by the President, Dr. Marguerat. The Secretary read the proceedings of the last meeting, which were duly approved.

Dr. Loverin recommended the name of Dr. G. Fredericke for membership, and on order of the President, the Society proceeded to ballot, and Dr. Fredericke was duly elected a member of the Society.

The President also recommended Dr. Brummind, House-Surgeon at Mercy Hospital, for membership.

Dr. Loverin opened the discussion of conjunctivitis, which was the order for the evening, by giving all the forms and the treatment for the different stages of the disease; and, although interesting and profitable, it elicited no facts of importance not already before the profession. The discussion was participated in by Drs. Holmes, Clarke, Paoli, and Marguerat.

Dr. Holmes remarked that conjunctivitis was one of the worst diseases we have to contend with, some apparently mild cases terminating unfavorably, therefore rendering the prognosis difficult. Remarked that the use of ice-water, *constantly* applied to the eyes, was of much importance, recommending it to be used under observation of a good nurse. Recommends in

the acute stage of conjunctivitis, the application of strong solutions of nitrate of silver, say from half a drachm to two scruples to the ounce of water in adults, and from eight to ten grains in infants. Seldom resorts to bleeding, but gives veratrum viride internally, as well as in the form of a lotion. Unless the eye is very vascular and has a dark red appearance, does not think it best to scarify.

Dr. Clarke remarked, that he had more confidence in the abstraction of blood in conjunctivitis than any other remedy. Cited the case of a nephew of his, having applied six leeches, followed by severe hemorrhage, suffering for some ten days from loss of blood. After the bleeding, however, the eyes were perfectly well.

Dr. Paoli remarked that he did not approve of the administration of tartar emetic (tartarized antimony), as recommended by Dr. Loverin, nor bleeding, but recommended diaphoretics, foot-baths, etc. He also protested against the use of strong solutions of nitrate of silver in the first stage of conjunctivitis.

Dr. Marguerat remarked, that he had observed very beneficial results in some of Dr. Holmes practice from the use of strong solutions of nitrate of silver.

Dr. Holmes remarked, that the patients afflicted with conjunctivitis usually came to him at a late day, but if they would come early he would give them a warm bath and veratrum viride for the first twenty-four hours. Also remarked that the majority of cases of chronic conjunctivitis become anæmic, requiring tonics with other remedies.

The Society then passed to miscellaneous business.

The subject chosen for next discussion was: "Disproportion of the Fœtus to the Pelvis, and the Mode of Treatment." Leaders: Drs. Reid and Paoli.

Society adjourned.

MORGAN COUNTY MEDICAL SOCIETY.

Society met at 2½ o'clock P.M., in Music Hall, Jacksonville, on Thursday, Feb. 13, 1868. Dr. Henry Jones in the chair.

Minutes of the last meeting were read and approved.

Dr. W. H. H. King reported a case of poisoning from laudanum: On Tuesday night, at 2 o'clock A.M., Dr. Prince and myself were summoned in great haste to see a young lady who, the messenger said, had been taking laudanum, and could not be awakened. With little delay the call was answered. On entering the house, the loud respiration of the patient, who lay in a back room, could be distinctly heard. She was found exhibiting the most prominent symptoms of poisoning from opium: the respiration stertorous; pupils contracted and insensible to light; countenance pale and cadaverous; pulse weak, thread-like, scarcely perceptible; the muscles in a complete state of relaxation; and totally insensible to all external impressions. Two empty vials, holding, respectively, two and three ounces, labeled laudanum, were found on a chair near the bedside, containing about one ounce of liquid, which had the distinct odor of laudanum.

It was stated by residents of the house that the young lady had gone to her room about 10 o'clock P.M., carrying with her two teacups, and that before retiring was engaged in writing. The alarm was given by a young man, a boarder in the house, who had gained access to her room through a window.

An emetic of ant. et potass. tartratis was at once administered, and then the stomach pump was brought into requisition, not waiting for the emetic to act. Three or four ounces of liquid, having the peculiar smell of laudanum, were pumped from the stomach, when it was thoroughly washed out with warm water. Dr. Prince then directed two drachms of extract of belladonna to be dissolved in a teacup of warm water, a tablespoonful to be administered every half hour, in accordance with the theory that the general poisonous action of one narcotic producing dilatation of the pupil will counteract the general poisonous action of another producing contraction. After the administration of four doses of this preparation, the pupils became widely dilated. There being no improvement in the condition of the patient, this remedy was suspended.

Artificial respiration was kept up continuously from 2 o'clock

A.M. until 3 o'clock P.M., it being hoped that if the functions of the lungs and heart could be sustained until the brain had recovered from the influence of the narcotic, that the patient would survive. At 3 o'clock P.M. the patient ceased to breathe, having manifested no symptoms of returning consciousness, except the flexion of the upper and lower extremities and the opening of her eyes twice.

Dr. King closed his remarks by asking the question: "Was the extreme dilatation of the pupils in this case due to the opium or to the belladonna?"

Dr. Prince exhibited and explained the obstetrical bandage of Dr. Hamilton, of Jerseyville.

Dr. Henry Jones related a case of placenta prævia, which had recently occurred in his practice. As an evidence of the rarity of the occurrence among practising physicians, no one of the sixteen physicians present had had in his practice a case of this presentation, except the case related by Dr. Jones.

Dr. Prince remarked that he believed that in this presentation the profession would eventually adopt the maxim, "The most speedy possible delivery."

Dr. Johnson, of Lynnville, reported a singular case of acute nervous disease, about which he had experienced considerable difficulty in a diagnosis. After describing it and relating his treatment, he asked for opinions as to its nature. No opinions were ventured or offered by any of the gentlemen present.

Dr. J. W. Craig read a paper on pneumonia.

Dr. A. H. Kellogg and Dr. E. H. Knight were appointed for essays for the next meeting.

Society adjourned at 4½ o'clock P.M., to meet on the second Thursday in April. C. T. WILBUR, M.D., *Sec'y.*

The Morgan County Medical Society met at Music Hall, in Jacksonville, at 2½ o'clock P.M., on Thursday, March 12, 1868, with the President, Dr. Henry Jones, in the chair.

The proceedings of the last meeting were read and approved. Dr. Charles Dutton being about to leave the State, gave notice of his withdrawal from the Society.

Dr. Kellogg, of Jacksonville, read a paper on some of the pathological conditions of typhoid fever. Dr. Knight was not present. Dr. Kellogg was requested to furnish his paper for publication in some medical journal.

Dr. Jones asked, "Did you observe, in autopsies of cases of chronic diarrhœa, any lesions of Peyer's glands?"

Dr. Kellogg replied, "We made some two hundred *post mortems.* A controversy directed my attention to that point especially. Do not remember to have seen typhoid fever without enlargement of the eliptical plates or ulceration, but in chronic diarrhœa I do not remember to have seen any. In one case, there was perforation of the intestine, but never lesion of Peyer's glands. Found lesions of Peyer's glands invariably in typhoid fever."

Dr. Prince asked, "In observation in the cases of malarial fevers, did you find lesions of the intestines?"

Dr. Kellogg remarked, "that he did not remember to have observed any such lesions. Some noted physicians have claimed that the same lesions are found in scarlet fever. I do not pretend to say that they always exist in typhoid fever; but I have always found them."

Dr. Edgar objected to the ordinarily received doctrine that ulceration of Peyer's glands is characteristic of the disease; claiming that the same lesion is found in chronic diarrhœa.

In the discussion and remarks on the treatment of typhoid fever, Dr. Bibb stated that, in certain stages of the disease, he found nitric acid and strychnine very beneficial.

Dr. Jones thought milk was an excellent and safe diet, contrary to the common belief. Typhoid fever seldom proves fatal in children under twelve years of age.

Dr. Fisher believes in supporting the patient. Prescribes milk, to be taken often and with regularity, as a diet. Also uses, as remedies, the turpentine emulsion and diluted nitric acid. A large proportion of patients, if supported with milk diet liberally, will get well without special remedies.

Dr. Henry Jones remarked, "I have seen a good many cases of typhoid fever among children; under 10 years of age it is

very rare; between 10 and 30 the most common; after 30 very rare.

Dr. Bibb remarked that, where the dry, fissured tongue is observed, glycerine is an excellent local application.

Dr. Jones suggested the application or administration of tartar emetic in inflammation of the mammæ of females after parturition, in doses of $\frac{1}{16}$ of a grain every hour from the first appearance of the disease.

Dr. Fisher remarked, that he had used and could confirm Dr. Jones' use of this remedy.

Drs. Lucas and McVey were appointed for essays for the next meeting.

At 5 o'clock P.M., meeting adjourned, to meet the second Thursday in April.

C. T. WILBUR, M.D., *Secretary.*

ANNUAL MEETING OF THE AMERICAN MEDICAL ASSOCIATION.

The Nineteenth Annual Session of the American Medical Association commenced Tuesday, May 5th, at 11 o'clock, at Carroll Hall, on G Street. The main portion of the hall is reserved for the use of the Association. The gallery is set apart for the use of the visitors, and was occupied during the session yesterday by a number of ladies and gentlemen.

The Convention was called to order at 11 o'clock, by the President, Dr. S. D. Gross, of Philadelphia, and prayer was offered by Rev. Dr. Pinckney, of this city, Washington, D.C.

The Permanent-Secretary, Dr. W. B. Atkinson, of Philadelphia, was at his post. Occupying seats on the platform, were Vice-Presidents Professor Post, of New York; Dr. Atlee, of Pennsylvania; Professor H. R. Storer, of Boston; and Dr. C. C. Cox, of Maryland.

The President next introduced Dr. Grafton Tyler, of Georgetown, who delivered the following address of welcome:

Mr. President and Gentlemen of the Association: The pleasant duty is assigned me to announce your welcome. After another year, spent in useful and laborious professional

service, you are again assembled for all the pleasures and all the hopes of a social and a scientific reünion.

Your coming among us has been anticipated and provided for in the spirit of fraternity and of hospitality; but until this moment, when we see our wishes realized in this vast gathering of representatives from every part of our territory assembled before us, we knew not the fervor which inspires us now to greet you as we do, one and all, with the warmest welcome of our hearts. As I see before me representatives from the East, from the West, from the North, and from the South, I feel that the first pleasant promptings of duty overflow in a joyous enthusiasm. Welcome, then—thrice welcome among us; not as strangers, for the same enchanting power which bids you here binds us to a common brotherhood in science; not as foreigners, for this city founded by Washington, the father of his country, bearing his immortal name, is the home of all his country's people.

In greeting you, we also congratulate ourselves, not only on your presence here to-day, but upon the prospect of this being the place of your biennial meetings. What more appropriate selection than this centre of the national life—the seat of the National Government. You are not more the conservators of the life of an individual than you are of the life of a nation. Medicine, in its philosophy, its precepts, and its practice, is coëxtensive with the operations of government. It is exalted in the seat of justice, deciding, with inflexible sternness, the fate of innocence or guilt. It is sought and embraced for its indispensable aid, not only to the internal welfare, but to the national defence by sea and by land, as well as to its commercial wealth and its progressive civilization. The purposes of our profession are not less important than any which operate near the central power of a great nation, to give it perpetuity and exercise its efficiency. What more appropriate selection, then, than this as the depository of the archives, and the chief place for the assembling of this National Medical Congress. Just ten years ago, you honored our city with your presence, since which time much has been developed and improved of professional interest among us. Two medical schools vie with each other in honorable emulation, aided by several hospitals, which are advancing to stability in the promotion of the interests of science and of humanity.

While we can present to you but one institution as commanding in all respects as any of which the older cities can boast, perhaps inferior to none the world ever knew, to harmonize the

broken, jarring links of intellect, you will have the rare opportunity to visit the depository of the accumulated gleanings of the battle-field and of the tented hospital—the worth of the noble sons of Hippocrates, whose temple you will see there adorned is more brilliant in the light of science, and as radiant in the glory of her achievements as ever Solomon's was with its gorgeous illumination. As you stand among those sacred relics in this hallowed temple, if associated reminiscences should touch your hearts, or scenes of strife in which you have mingled should rise up before you, the consciousness of having acted not to destroy, but to save—not to torture, but to soothe and comfort—not to wound, but to bind up, and staunch the flowing life blood—to cool the fevered lip—assist the suffering and solace the dying—will vindicate you as followers of the great physician "who went about doing good."

Does the martial hero rise to the pinnacle of this world's glory over thousands slain upon the battle-field? What greater glory his whose achievements, not only these, but in all his efforts and all his doings, secures alike to friend and foe only solace, comfort—aye, even life itself! The ministers of science, with earnest zeal and hopeful purpose, have made even a country's woes to contribute to the entertainment, the instruction, and good of all her people.

You are assembled here to-day to consider the most important interests confided to man, the health, the happiness, the social order, the domestic comfort of individuals, of communities, of nations, of the world—I say, of the world—for not only individuals, communities, and nations, but all mankind have received and acknowledged the blessing of American medical science. If we have received from abroad that great boon to man which has saved millions from deformity or death, we have given in turn that anæsthetic agent which, while it aids the efficiency of art, gives to all mankind freedom from pain, aye, not only is the surgeon's knife without this infliction, but the sorrow of woman, now tempered with joy, commands throughout the world a grateful homage to the genius of America.

In all the efforts of man, nothing has contributed so much to success as the principle of combination, and nothing has more secured the advancement of science than the establishment of associations and societies. The larger part of our knowledge is derived from comparing our own observations with those of others, and the mutual communication of our thoughts we solve many otherwise insuperable difficulties. I see now before me, the distinguished representatives of the universities, the hospi-

tals, the societies, and associations of the cities of every State; I see before me, the representatives of the self-reliant, self-sacrificing, and no less honorable and efficient country practitioner; I see before me, the representatives of the army and navy, whose achievements in science cannot be eclipsed by the glory of war. Thus the profession of the whole country becomes associated for combined and harmonious effort in improving the result of their labors. For twenty-one years you have thus met together at great personal sacrifice—though sacrifice is common in your daily avocations, and attends all your paths to success.

The history of medicine in this country affords nothing compared with these annual meetings, which has so much stimulated the industry, the generous professional and scientific ardor, the ethical spirit, and useful emulation of its votaries.

Well may the founders of this Association, who have been permitted to live so long, be this day proud of its record.

Thank God, that he who was "*primus inter pares*" is still spared to give us the joy of his genial presence and the blessing of his wise counsel and commanding influence, for whatever is now, or may be, recorded in the transactions of this Association, all that is profound in experimental research, all that is ingenious in discovery, all that is sublime in speculative science, all that is excellent for practical good, flowing to this common receptacle from the incitement of his forethought and the inspiration of his genius, while they distinguish their authors, become enduring monuments of his fame.

Under the guidance of well-disciplined minds, this Association, strictly national in its organization, and only professional in its aims and purposes, has singularly preserved its integrity, and, in confining its action to these purposes, has given an example worthy of imitation.

It is composed of the young and the old, of every positional grade—embracing always the great, the wise, and the illustrious—all of whom, as if inspired for the advancement and the dignity of the profession, though representing different States, with clashing opinions distinguishing them from one another, though divided in religious and political sentiment, and we may say even in views of social order, yet coming together as a common brotherhood in science, uniting in one grand concert to celebrate her truths, and in laying upon her altars the free gifts and never-fading offerings of wisdom and humanity.

While we feel the spirit of this sublime inspiration, we bid you again, one and all, the earnest welcome of our hearts.

At the conclusion of the address, which was warmly ap-

plauded, the President announced the programme, after which the Secretary called the roll, and most of the members responded. It was stated, however, that the entire delegation would be present to-day.

The next business in order was the presentation of members, and Dr. W. F. Percival, of Aiken, South Carolina, was admitted as a member by invitation.

A motion was made to postpone the delivery of the address of the President until to-day, but did not prevail, and Professor Gross then delivered his inaugural address, in which he occupied an hour. He returned his profound gratitude for the distinguished honor conferred upon him, in placing him in a position so often occupied by the distinguished men of the profession. For this mark of respect and confidence, he could only promise to do his duty impartially, and, as far as possible, expedite the business of the Association. The Professor then, at length, explained the object and ends of the Association, the duties of the profession, the advancement of the science, the brilliancy of the rank attained by the American faculty in the ranks of the profession throughout the world, the great good the Association had done in the past twenty years by its annual gatherings, and the continued good promised by its uninterrupted meetings. He gave, at length, his views on the reception of prize essays on medical subjects, and of the duties of professors of colleges, the management of hospitals, etc. He spoke in eloquent and impressive language of the departed members of the Association, and was exceedingly brilliant in his hopes and sanguine expectations of a bright future for this great Republic; entreated the great fraternity to go on doing good, as usual, throughout the length and breadth of the land, and concluded by again returning thanks to the Association for the honor they have conferred upon him.

At the conclusion of the address, on motion, it was ordered to be printed.

The regular business next followed—and the committees were called.

On Ophthalmology, Dr. Joseph S. Hildreth, Illinois, chairman; on Cultivation of the Cinchona Tree, Dr. J. M. Toner, District of Columbia, chairman; on Surgical Diseases of Women, Dr. Theophilus Parvin, Indiana, chairman; on Rank of Medical Men in the Navy, Dr. N. S. Davis, Illinois, chairman; on Insanity, Dr. C. A. Lee, New York, chairman; on American Medical Necrology, Dr. C. C. Cox, Maryland, chairman; on Leakage of Gas Pipes, Dr. J. C. Draper, New York, chairman;

on Medical Ethics, —— ——, chairman; on Plan of Organization, Dr. C. C. Cox, Maryland, chairman; on Provision for the Insane, Dr. C. A. Lee, New York, chairman; on the Climatology and Epidemics of Maine, Dr. J. C. Weston; of New Hampshire, Dr. P. A. Stackpole; of Vermont, Dr. Henry Janes; of Massachusetts, Dr. Alfred C. Garratt; of Rhode Island, Dr. C. W. Parsons; of Connecticut, Dr. E. K. Hunt; of New York, Dr. W. F. Thomas; of New Jersey, Dr. Ezra M. Hunt; of Pennsylvania, Dr. D. F. Condie; of Maryland, Dr. O. S. Mahon; Georgia, Dr. Juriah Harriss; Missouri, Dr. Geo. Engelman; Alabama, Dr. R. Miller; Texas, Dr. T. J. Heard; Illinois, Dr. R. C. Hamil; Indiana, Dr. J. F. Hibberd; District of Columbia, Dr. T. Antisell; Iowa, Dr. J. W. H. Baker; Michigan, Dr. Abm. Sager; Ohio, Dr. J. W. Russell; California, Dr. F. W. Hatch; Tennessee, Dr. Joseph Jones; West Virginia, Dr. E. A. Hildreth; Minnesota, Dr. Samuel Willey: on Clinical Thermometry in Diphtheria, Dr. Joseph G. Richardson, New York, chairman; on the Treatment of Diseases by Atomized Substances, Dr. A. G. Field, Iowa, chairman; on the Ligation of Arteries, Dr. Benjamin Howard, New York, chairman; on the Treatment of Club-foot without Tenotomy, Dr. L. A. Sayre, New York, chairman; on the Radical Cure of Hernia, Dr. G. C. Blackman, Ohio, chairman; on Operations for Harelip, Dr. Hammer, Missouri, chairman; on Errors of Diagnosis in Abdominal Tumors, Dr. G. C. E. Weber, Ohio, chairman; on Medical Education, Dr. A. B. Palmer, Michigan, chairman; on Medical Literature, Dr. Geo. Mendenhall, Ohio, chairman; on Prize Essays, Dr. Charles Woodward, Ohio, chairman.

Most of the committees responded as they were called, and their reports were referred to their appropriate sections.

The Committee on Medical Ethics, on Consultation with Female Practitioners, made a report, closing with the following resolutions:

Resolved, That the question of sex has never been considered by this Association in connection with consultations among medical practitioners, and that, in the opinion of this meeting, every member of this body has a perfect right to consult with any one who presents the "only presumptive evidence of professional abilities and acquirements" required by this Association, *viz.*: "a regular medical education."

Resolved, That the resignation of Dr. Julius Homberger, of New York, be accepted, and that all further consideration of him, or of his peculiar methods of procuring practice, be indefinitely postponed.

The report was laid over.

Drs. N. P. Tallifero and Buckner preferred charges against Dr. A. G. Field, of Iowa. The matter was laid over for investigation.

The Association then adjourned, to meet to-day at 9 o'clock.

In the afternoon, the several sections were engaged in listening to reports, and discussing the merits of the same.

The Committee on Prize Essays reported that four essays had been submitted, and the two prizes of $100 each were still in the hands of the Committee, as no awards had been made. They recommended that both should be offered for the best essay, but the subject was indefinitely postponed.

The general meetings of the Association will be restricted to the morning sessions, and the afternoon sessions, commencing at 3 o'clock, will be devoted to the hearing of reports and papers, and their consideration, in the following sections: 1. Chemistry and Materia Medica. 2. Practical Medicine and Obstetrics. 3. Surgery and Anatomy. 4. Meteorology, Medical Topography, and Epidemic Diseases. 5. Medical Jurisprudence, Hygiene, and Physiology. 6. Psychology.

The members of the Association called upon President Johnson last evening, and the East Room of the Executive Mansion was thronged until 9 o'clock with distinguished representatives of the medical profession from all parts of the country. Dr. Grafton Tyler presented the members to the President, who was assisted in the honors of the evening by Mrs. Stover and Mrs. Patterson, and Secretary Seward.

The reception at the residence of Hon. Schuyler Colfax took place from 9 to 10 o'clock, and after a cordial welcome on the part of Mr. Colfax, who was assisted by Mrs. and Miss Matthews, the company retired.

This evening the Association will call upon Senator Edwin S. Morgan, of New York. They will also spend several hours at the Army Medical Museum in examining the microscopical collections.

SECOND DAY.

Pursuant to adjournment, the Association met at 9 o'clock yesterday morning in Carroll Hall. There were present over three hundred delegates. Among the distinguished visitors who occupied seats on the platform, were Professors Stone, of New Orleans, Smith, of Baltimore, and Marsden, of Canada. Professor Gange, of the Prince Albert Veterinary College, London, the author of a number of valuable medical works,

especially one on the rinderpest, was also an invited guest; and Senator Drake, of Missouri.

The report of the committee on the topics embraced in the President's address, was received, and the suggestions of the committee were ordered to be placed in the form of resolutions.

Dr. Cox, chairman on Alterations in the Constitution of the Association, and to revise the plan of organization, presented a report which advises many changes in the laws and orders governing the admission of members, and many amendments to the constitution.

The report was ordered to be printed, placed in the minutes of the proceedings, to be acted on at the next meeting of the Association.

A communication was received from the medical fraternity of New Orleans, inviting the Association to meet in that city at their next annual meeting. The communication was temporarily laid on the table.

A number of papers were received and referred to the various committees.

The Association then took a recess of fifteen minutes, so as to give the various State delegations an opportunity to select a member from their respective States to form the Nominating Committee for the ensuing year. This committee (one from each State) are empowered to nominate all officers for the Association.

At 10½ o'clock, the Association reassembled, when the various State delegations sent in the names of the delegates they had selected to form the Nominating Committee.

The following are the names selected: Maine, Dr. N. P. Monroe; New Hampshire, G. B. Switchell; Vermont, none; Massachusetts, H. R. Storer; Rhode Island, Bullock; Connecticut, Woodward; New York, Armsley; New Jersey, Lilly; Pennsylvania, Pollock; Delaware, Askew; Maryland, Hellsby; Virginia, Owen; West Virginia, Cummins; Georgia, Arnold; Ohio, Mussey; Illinois, Hildreth; Tennessee, John Keller; Alabama, Wetherby; Indiana, Sutton; Iowa, Cleaver; Michigan, Palmer; District of Columbia, F. Howard; United States Army surgeons, Otis.

After the reading of the names and their acceptance, it was resolved that the committee retire at once to organize.

While the committee were absent, several papers were received and referred to the various committees.

A number of names of physicians were received as candidates for membership to the Association. They were referred to the proper committee.

A letter was received and read, inviting the Convention to hold its next annual session at Fauquier White Sulphur Springs, Virginia. Referred.

Dr. Palmer, chairman of Committee on Medical Education, submitted a report of some length, which was listened to with marked attention by the Convention. It was referred to the Committee on Publication, and ordered to be printed.

On motion, Dr. Thomas J. Bunn, of the Choctaw Nation, was admitted as a delegate.

Dr. Mendenhall then submitted a written report, in detail, on medical literature. Referred to the Committee on Publication.

On motion, the communications in relation to the place of holding the next annual convention were taken up, and referred to the Committee on Nominations.

On motion, the Chair was authorized to appoint a committee of delegates to attend the Medical Convention at Montreal, Canada, in September next.

The report of the Committee on Medical Ethics, submitted Tuesday, was taken up and discussed.

The resolution was as follows:

Resolved, That the question of sex has never been considered by this Association in connection with consultations among medical practitioners, and that, in the opinion of this meeting, every member of this body has a perfect right to consult with any one who presents the "only presumptive evidence of professional abilities and requirements required by this Association," *viz.:* a regular medical education.

In support of the resolution, Dr. Washington Atlee, of Pennsylvania, delivered a vigorous speech, in which he advocated the recognition of female medical practitioners by the Association.

He spoke of the difficulties which had been thrown in the way of women making progress in their studies; but now they had a college of their own, which was free from all reasonable objections. In other countries, women had achieved the highest honors as medical practitioners, and he thought what could be done in France and Germany could most certainly be honorably done in the United States. He hoped the resolution would be adopted.

Dr. D. F. Condie, of Pennsylvania, next took the stand. It was his firm conviction that the mass of women would achieve higher honors in following the line of duty which had been marked out for them in the order of nature, and would do more good than in turning out physicians.

This remark was greeted with enthusiastic applause, but the Doctor begged them to keep their demonstrations of applause until he got through.

He proceeded to say: I deny that it is impossible for women not to be excellent physicians. There have been many eminent professional female medical practitioners in Europe, and the opportunities were equally favorable for the development of skilful and accomplished female medical practitioners in this country. But he thought this was a subject foreign to the interests of the American Medical Association. The question whether a male physician would consult with them ought to be left to individual judgment; let every member decide for himself. He then spoke of the situation in which one might be placed in an extreme case, where it was important, nay, absolutely necessary, that prompt action should be taken; but should the Association by its action condemn their recognition, what could a member of the Association do? He hoped the resolution would be laid on the table, and the course to be followed left entirely to individual discretion. The more it was discussed, and the more the Society opposed them, the greater would be the sympathy created for this class of the profession.

Dr. N. S. Davis, of Chicago, was the next speaker. His views of the subject were clearly defined, and he believed this Association had never taken action upon any matter which distinguished practitioners, either on account of sex or color. There was nothing in the laws of the Association forbidding any member from consulting with any qualified person one way or the other. It was of no importance who the party consulted was, provided they were duly qualified. That had become the universal standard.

If any local association saw fit to enact a law restricting its members, that was a matter for such societies to determine; but those so interfered with should not claim the legislative power of this Association to pass *ex post facto* laws for their especial benefit.

Dr. Davis then spoke of the dignity of woman, and the important part which she had at all times taken in the affairs of nations, and in all ages of the world. His respect, his reverence, his love, would forbid him drawing any distinctions between the sexes. Wherever and whenever humanity had needed her assistance, she was foremost in good works. The law of the Creator had assigned her sphere of duties; but if there was one who conscientiously believed that she could be of greater service as a physician, why should she be opposed. He

was in favor of the broadest equality. If she was to be equal in the profession, let her be equal on the farm and in the ditch. Let the members consult with whom they please, if they are professionally qualified. He moved that the whole matter be indefinitely postponed.

The previous question being called for, the motion prevailed, with but few dissenting voices.

Dr. Atlee was anxious to say something, but the Chair ruled all remarks out of order.

Then, said Dr. Atlee, the Pennsylvania delegation are tied hand and foot.

The next business was the discussion of the following resolution:

Resolved, That the resignation of Dr. Julius Homberger, of New York, be accepted, and that all further consideration of him or of his peculiar methods of procuring practice be indefinitely postponed.

Dr. L. A. Sayre moved that the name of Dr. Julius Homberger be stricken from the rolls. He gave as his reason for such a motion, that the individual referred to had violated the code of ethics by which the members are bound to be governed. He also read a letter of inquiry from the editor of the *New Orleans Medical Journal*, concerning the standing of Dr. H., who was now in that city, advertising his "wares *in extenso*."

Dr. Howard objected to the striking of Dr. Homberger's name from the roll on the testimony of a single accusation. He moved that this matter be referred to a committee of three, with instructions to investigate and report.

Dr. Arnold, of Georgia, denied that it was a single accusation. He stated that the testimony was abundant and well proven. The acts of this Dr. Homberger were disgraceful to the profession.

Dr. Noell, of Baltimore, obtained the floor and read the advertisement of several doctors and testimonials from physicians in practice of the qualities of certain quack medicines, and held that it would not be honest or proper to strike Dr. Homberger's name from the rolls until the skirts of the Association were clear of the same sin. It was a question of advertising, and he wanted it to be decided whether members of this Association should be permitted to lend their names to endorse the specialties of quack doctors.

Dr. Raphel, of Baltimore, thought too much importance was given to this question. Dr. H. had resigned, and it ought to have been accepted, though he was no doubt glad of the advertisement given him.

Dr. Davis, of Chicago, reviewed Dr. H.'s relations to the Society, and said the real question was, Shall a member who defied its rules be permitted to resign? This was last year referred to the Committee on Ethics, who reported the resolution. He thought the simplest plan to get rid of him and his humbugs was to accept his resignation.

Dr. Palmer, of Michigan, insisted that a resignation required the action of the Society. Dr. H. had violated its plainest rules. He should, therefore, be expelled.

The vote for the expulsion of Dr. H. passed without dissent.

Dr. Howard rose to make a personal explanation, to set himself right on the records of the Association. He did not wish to be understood as defending the course of Dr. H., but was opposed to hasty action, and wished also to learn the sense of the Association on the subject of advertising.

Dr. Hartman, of Baltimore, Maryland, submitted the following resolution:

Whereas, the third paragraph of the first article of the Code of Medical Ethics of the American Medical Association expressly declares it to be "derogatory to the dignity of the profession to resort to public advertisements, inviting the attention of individuals affected with particular diseases;" and,

Whereas, certain members of the medical profession in the city of Baltimore, who are permanent members of the American Medical Association, have permitted their names to appear in the daily newspapers endorsing the qualifications and professional character of a foreign specialist who has recently settled here; therefore,

Resolved, That by such conduct these gentlemen have been accessory to a violation of professional ethics, and guilty of an unwarranted and unjustifiable discrimination against those members of the profession who are quietly, legitimately, and unostentatiously prosecuting the respective branches of medical specialism.

Resolved, That is the sense of the Baltimore Medical Association that either of the above paragraphs of the code of ethics should be so modified as to allow our own professional brethren who are engaged in the practice of specialties to advertise, and thus be placed on an equal footing with the foreign specialist, who is too often a mere adviser, whom chance has thrown among us; or those gentlemen who have permitted the use of their names to swell the patronage of a special specialist, to the injury of equally deserving members of the profession in our own city, should be compelled to withdraw their names from such advertisements.

Resolved, That the delegates to the American Medical Association from this Society be instructed to bring this matter, so vital to the dignity and honor of the profession, before that body at the earliest possible moment.

The paper was referred to Committee on Ethics, after which the Association adjourned until to-day, at 9 o'clock.

The microscopical exhibition in the lower hall of the Army Medical Museum, on Tenth Street, last evening, was one of the finest ever witnessed in the United States. The entire delegation was present, as well as a large number of the prominent Government officials. Previous to the exhibition, the guests spent several hours in examining the large collection of anatomical specimens collected in the upper halls.

The exhibition was conducted by Dr. J. J. Woodward, and proved most interesting to all present. The members of the medical faculty manifested their admiration at the success attained in photographing anatomical specimens by their enthusiastic applause.

The enjoyments of the day terminated with a brilliant reception at the residence of Senator Morgan.

This evening the Association will be received by Chief-Justice Chase and Mayor Wallach.

THIRD DAY.

The Association resumed its session yesterday morning at nine o'clock, the President, Dr. S. D. Gross, in the chair. The attendance of delegates was about the same as on the preceding days. There were a few visitors in the gallery. A number of valuable works on medical subjects were gratuitously distributed among the members of the Association, as were also samples of new and improved medicinal preparations.

A letter was read from Dr. Cornelius Boyle, of Fauquier, White Sulphur Springs, Virginia, inviting the Association to hold its next annual session at that place; which was referred to the committee on nominations.

The reports of the treasurer and publication committee were then read and accepted.

The report of the committee on nominations being in order, the same was presented, and after some debate it was accepted. The report names New Orleans, Louisiana, as the place to hold the next meeting of the Association, and fixes the time for May next. The following officers of the Convention were nominated by the committee:—President, Dr. Wm. O. Baldwin, of Alabama; 1st Vice-president, George Mendenhall, of Ohio; 2d

Vice-president, Noble Young, of Washington, D.C.; 3d Vice-president, Dr. N. P. Monroe, of Maine; 4th Vice-president, Dr. S. M. Bemis, of Louisiana; Treasurer, Dr. Caspar Wistar, of Philadelphia, Pa.; Committee on publication, Dr. Francis G. Smith, Jr., of Philadelphia, (chairman); Dr. Wm. B. Atkinson, of Philadelphia; Dr. H. F. Askew, of Delaware; Dr. Richard M. Cooper, of New Jersey; J. H. Lovejoy, of D.C.; Dr. Wm. Mabury, of Pennsylvania.

Dr. Mabury offered an additional amendment to article five, plan of organization, "No report purporting to emanate from any committee shall be received, unless it be signed by a majority of its members." Laid over.

The secretary suggested to the delegates that the business of the publication committee was rapidly on the increase, and that the funds on hand were not adequate to meet the expenses of printing all the proceedings as they should be.

The committee on the President's address made their report, accompanied by the following resolutions:—

1. Resolved, That the publishing committee are hereby invested with plenary power in regard to all papers not read before the Association or in the section, to publish or not, as may seem expedient.

2. Resolved, That a committee of three be appointed by the Chair, to take into consideration the subject of appointment of a commissioner in each judicial district or circuit, whose duty it shall be to aid in the examination of witnesses in every trial involving medico legal testimony, and to report at the next meeting of the Association.

3. Resolved, That a committee be appointed to report next year, in regard to the subject of an annual register of the regular profession in the United States, and in the meantime to take necessary measures to carry the plan into effect.

4. Resolved, That a committee be appointed to take into consideration the subject of the best mode of providing a fund for the relief of widows and orphans of deceased physicians, and report to the Association at the next meeting.

5. Resolved, That a committee of three be appointed to take into consideration the subject of the establishment of veterinary colleges, and report at our next meeting.

6. Resolved, That all hospitals and public institutions for the care and treatment of the sick should have educated, well-trained nurses only; that this Association would strongly recommend the establishment in all our large cities of nurse training institutions.

The first five resolutions were adopted, and the sixth was referred to a special commitee, consisting of Drs. S. D. Gross, of Philadelphia; Elisha Harris, of New York; and Charles Lee, of New York.

The Chair then announced the following committees:—

Commissioners to Aid in Trials Involving Scientific Testimony—Drs. John Ordeonaux, of New York; A. B. Palmer, of Michigan; Stephen Smith, of New York; J. W. Dunbar, of Baltimore.

Annual Medical Register—Drs. Packard, of Philadelphia; Wm. B. Bibbins, of New York; and Ellsworth Eliot, of New York.

Devising a Plan for the Relief of Widows and Orphans of Medical Men—Drs. J. H. Griscom, of New York; N. S. Davis, of Illinois; and A. C. Post, of New York.

Veterinary College—Drs. Thos. Antisel, of Washington, D. C.; C. C. Lee, of New York; and John C. Dalton, of New York.

He also appointed the following delegates to represent the American Medical Association in Canada, to meet in September next—C. C. Cox, M.D., LL.D., of Maryland; Drs. John L. Atlee, of Pennsylvania; N. S. Davis, of Illinois; Charles A. Lee, of New York; Grafton Tyler, of D.C.; W. M. Wood, of the Navy; and S. D. Gross.

On motion of Dr. Howard, of Maryland, the following gentlemen were appointed to prepare and submit at the next meeting of the Convention, a report on the subject of specialties in medicines—Drs. E. Lloyd Howard, Frank Donnelson, and Christopher Johnson, all of Maryland.

Dr. C. C. Cox, of Maryland, then read the report on American medical necrology, which occupied some time, and was ordered to be printed.

There were several resolutions offered, and appropriately referred.

At 12 o'clock, Dr. Atlee, of Pennsylvania, escorted to the platform the newly elected President, Dr. William O. Baldwin, of Montgomery, Alabama.

The appearance of these gentlemen was the signal for enthusiastic applause, and when silence had been restored, Dr. Atlee introduced Dr. Baldwin to the Convention through the retiring President, Dr. Gross, and the manner in which the latter welcomed his successor thrilled the hearts of all present with patriotic joy. Dr. Gross said:

I welcome you as the representative of our long lost brethren. May God bless you; God bless your people; God bless all of us.

Dr. Baldwin then delivered the following address:

Mr. President, and Gentlemen of the American Medical Association:—In returning you my sincere thanks for the honor you have conferred upon me in electing me to preside over the deliberations of this body—an Association which embraces in its membership so many names justly distinguished over the civilized world for genius and learning—believe me, gentlemen, it is with feelings of embarrassment equalled only by my profound sense of gratitude and my admiration for the magnanimity which prompted the offering. It is the more grateful to me that it was the free, unasked-for gift of the Association. I did not seek the position. High as the honor is, I should deem it purchased at too dear a price, if, in order to obtain it, it had been necessary for me to solicit the votes of any men from any section, even those from my own society.

I am painfully conscious, gentlemen, of my own unworthiness of the high distinction, and am not vain enough to appropriate the honor all to myself. I do not accept it as an individual compliment, but rather as the faithful hand of brotherhood stretched out with a generous friendship and true nobility of soul in its desire to heal and obliterate the wounds in its own bosom, for whose creation it was in no way responsible.

Pardon me for taking this opportunity for alluding briefly to a subject which has not, perhaps, heretofore been considered germane to occasions like the present, and which I now approach with both pain and hesitation. I am sure that most of you have not failed to observe the very meagre representation which this Association has had from the Southern States since the close of the late war. This has probably been due to several causes, to only one of which, however, I desire to allude. I will not disguise from you, gentlemen, the fact that there are many physicians in the South disposed to hold themselves aloof from your councils.

The resolution passed at your meeting in 1866, offering again the hand of fellowship for your Southern brethren, owing to the peculiar condition of our country at that time, and the fact that but little of the medical literature and news of the North met the eyes but of few, and there are still among us those who feel that your hearts are still stolid against them, and who believe that, notwithstanding some formal declarations to the contrary, most of you, in your private feelings, have not yet been able to rise sufficiently above the prejudices of the past to enable you to receive them in such a manner as to make their presence here either agreeable to them or profitable to the Association.

Looking to this conviction of theirs, strengthened by the fact that they are still under the cloud of the nation's displeasure, and denied the political rights to which they esteem themselves entitled, they have felt that it would be both undignified and unmanly to present themselves at your doors for admittance to your councils, or to offer to affiliate with you, until they can come as your peers in all things—in political and social rights, as well as in scientific zeal and devotion.

So far as my observation has extended, I am sorry to know these sentiments have prevailed with many, and it is but frankness in me to say so. I am free to confess that I, with many others, have not sympathized altogether with these feelings. I saw the resolution adopted in 1866, and before referred to, inviting us, in most respectful and conciliatory language, to resume our places in this Association. I felt this was all you could do, all you ought to do, all we could ask, and was satisfied with it, and only regret it did not obtain a more general circulation. The society to which I belong, with entire unanimity, appointed its full quota of delegates to this meeting. I came here to lend my humble example to the work of reëstablishing our former relations. I never doubted I would be received with courtesy, and even with kindness.

The broad, liberal, and catholic sentiments proclaimed from this stand, in the annual address of that noble old Roman, our distinguished President, Dr. Gross, knowing in these halls "no North, no South, no East, no West"—he whose clustering honors, though won in your midst, yet gather a beauty and brilliancy from the love and veneration in which he is held in the South—must be received as a declaration of sentiments and principles by this Association, and cannot fail to correct the errors and misrepresentations which have prevailed in our section. This action of yours to-day, in awarding, through me as one of her humble representatives, the honorable and distinguished office of president of this Association, a position which might well be claimed for one of the many of your own renowned and gifted sons, will, I am sure, testify to our brethren of the South, in silent but forcible language, the injustice which has been done you by those who have taken a different view of your real sentiments and feelings towards us.

In saying this much I do not intend it as a reproach to those of my section who have hitherto so misunderstood you, and you, in your generosity, I am sure, are prepared to concede much to the pride of a noble manhood, who, standing amidst the memories of blasted hopes and ruined fortunes, have, perhaps, been

disposed to guard with too jealous and sensitive an eye that which is dearer to them than fortune or life itself, and which I am sure you would be the last to willingly see compromised—their personal and professional dignity and honor.

For myself, and for those whom I represent, I grasp with unaffected pleasure the hand which you have so gracefully and magnanimously offered, and I hope and believe this sentiment will meet a ready response from all our brethren of the South. *Let us again be united as friends and brothers.* Ignoring past and present political difficulties, let us exhibit to this distracted country an example of forgiveness and toleration worthy the emulation of a great and noble people. Let the bonds which we acknowledge here bind us in all portions of this broad land as a sacred brotherhood, engaged in a common toil, with one mind, one heart, and one purpose. Let the place annually selected for our meetings be our Mecca. There let us meet with harmony of sentiment for thorough organization, for connected and concerted action, without which no great science or art can ever attain its highest perfection. Exacting from each other only the qualifications necessary for honorable membership, let us there mingle in the sacred precincts of our humane profession, and join hands and sympathies in the strengthening influences of association and fellowship; and as we lay fresh offerings in the temple of a noble science, and build new fires on her altars, let us cherish in our hearts the ennobling sentiment of brotherly love.

In conclusion I would say we have doubtless most of us, aye, certainly most of us, in that land of many sorrows from whence I came, tasted the bitter fruits of the bloody and unholy war through which we have passed, and wept over its dire calamities. *We*, as an association, had no agency in its creation. It belongs now, with all its disasters and miseries, to the dead past, and as *we* had no cause for quarrel then, we have none now for separation or estrangement. We may not forget our sorrows for the past, and we will still water with our most sacred tears the graves of our noble sons who fell victims to the strife. But whenever there is a grief at the heart, a tear for the ashes of the past, let us wipe from it all traces of bitterness, and drape its memories and sanctify its sadness with the Christian virtues of CHARITY, FORGIVENESS, and FRATERNAL LOVE.

During its delivery the speaker was frequently interrupted with applause, and on concluding was the recipient of the hearty congratulations of those on the platform.

The President, Dr. Gross, said he desired to avail himself of

this opportunity to correct an erroneous statement which had gained publicity throughout the Southern States, in regard to a resolution alleged to have been passed by this Association, recommending that the Government should make surgical instruments and medicines contraband of war. He said, I take this occasion to deny that the American Medical Association ever passed any such resolution, and hope our President elect will do every thing in his power to promulgate this fact among our Southern brethren.

Dr. Davis desired to say in addition, that not only had no such resolution ever been adopted, but that it had never been introduced.

This statement was, on motion, ordered to be recorded in the the transactions of the Association.

An invitation was read from the Young Men's Christian Association, of this city, for the Medical Association to visit their library and reading-room.

On motion, the committee on archives was continued.

On motion, the secretary was instructed to appoint a subcommittee of arrangements of three from each State.

Dr. N. S. Davis, of Illinois, offered a resolution instructing the Chair to appoint a committee of three, to report at the next session, on the practicability of establishing a library of American medical works, including books, monographs, and periodicals. Adopted.

The Association then adjourned till nine o'clock to-morrow.

In accordance with the invitation extended to the members of the Association, they assembled at the Capitol last evening, to witness the illumination of the dome. The several sections were lighted, and the manner in which the electrical apparatus is worked was explained by Prof. Gardner, to the ladies and gentlemen present.

The reception at the residence of Chief Justice Chase was attended by the delegates in a body, and an hour was pleasantly passed in conversation and in enjoying the hospitality of the house.

The reception at the residence of Mayor Wallach took place at 10 o'clock, and was attended by all the delegates. It formed a brilliant conclusion to the cordial welcome extended to the distinguished representatives of the profession by the people of Washington. The remainder of the evening was spent in social enjoyment. A sumptuous repast was provided, and the party did not separate until a late hour.

FOURTH DAY.

The Convention resumed its session yesterday morning at 9 o'clock, Dr. Gross in the chair.

Dr. Tyler read an invitation from Mr. Sykes, inviting the Convention to visit Mount Vernon, at half-past 11 o'clock, on his steamer; which was accepted.

He also read an invitation from Mr. King, requesting that he be allowed to make a photograph of the Convention; which was accepted, and at 10 o'clock the picture was made in front of the hall.

Dr. Martin, of Massachusetts, offered the following, which was adopted:

It seems proper that this Association should not be without a committee on a subject so transcendantly important as that of vaccination; therefore

Resolved, That a standing committee of one be appointed upon the whole subject, to report from time to time on such topics connected with vaccination as shall, in the estimation of such committee, appear of chief practical interest and importance to the profession.

Dr. Antisell, of this city, was appointed as the committee.

The committee on nomination made the following report, which was adopted:

Assistant Secretary—Dr. A. G. Semmes.

Committee of Arrangements—Drs. J. G. Richardson, S. M. Bemis, C. Beard, L. T. Pimm, Warren Brickell, S. Chopin, and —— Mitchell.

On Medical Education—Drs. J. C. Reeve, Dayton, Ohio; J. S. Hildreth, Chicago; W. D. McCook, Pittsburg, Pa.; Frank Rice, Memphis, Tenn.; and S. H. Pennington, Newark, N.J.

Committee on Necrology—Drs. S. S. Cox, Maryland; E. B. Stevens, Ohio; W. F. Peck, Iowa; H. Van Dozen, Wisconsin; J. M. Toner, District of Columbia; Joseph Simpson, United States Army; J. C. Weston, Maine; Henry Bronson, Connecticut; Henry Noble, Illinois; Charles Eversfield, United States Navy; T. Parvin, Indiana; J. C. Hupp, West Virginia; Joseph Mauran, Rhode Island; J. M. Keller, Tennessee; H. T. Asken, Vermont; H. J. Clark, Massachusetts; E. M. Moore, John Shrady, New York; Charles A. Logan, Kansas; —— Stewart, Minnesota; Henry Miller, Kentucky; F. G. Armour, Michigan; John Blaine, New Jersey; A. Fleming; Howard Wallace, Pennsylvania; R. D. Arnold, Georgia; J. S. Wetherly, Alabama; S. L. Welch, Texas; T. M. Logan, California; John W. H.

Baker, Iowa; P. A. Stackpole, New Hampshire; L. Joynes, Virginia; W. Brickell, Louisiana; David Booth, Mississippi.

Committee on Literature—Drs. Edward Warren Baltimore; Joseph Jones, Nashville; Edmund Andrews, Chicago; J. J. Woodward, United States Army; P. S. Wales, United States Navy.

Committee on Climatology—Drs. J. C. Weston, Maine; P. A. Stackpole, New Hampshire; Henry James, Vermont; Alfred C. Garrett, Massachusetts; C. W. Parsons, Rhode Island; E. K. Hunt, Connecticut; W. T. Thomas, New York; E. Hunt, New York; D. T. Condre, Pennsylvania; O. S. Mahon, Maryland; J. Harris, Georgia; George Engleman, Missouri; R. F. Michel, Alabama; T. J. Heard, Texas; R. C. Hamill, Illinois; J. F. Hibbard, Indiana; T. Antisell, District of Columbia; J. C. Hughes, Iowa; Abraham Sagur, Michigan; T. L. Neal, Ohio; F. W. Hatch, California; B. W. Avent, Tennessee; E. A. Hildrath, West Virginia; —— Owen, Virginia; Samuel Willey, Minnesota; L. B. Bush, Delaware; G. W. Lawrence, Arkansas; —— Comptin, Mississippi; Louis Pimm, Louisiana.

Committee on Prize Essays—S. M. Bemis, J. Scott, W. Brickell, S. A. Smith, C. Beard.

Special Committee on Alcohol and its relations to Medicine —John Bell, J. R. Dunbar, and Richard McSherry.

On Cryptogamic Origin of Disease, with special reference to recent microscopic investigations on that subject—Dr. Curtis, United States Army.

On Diseases of the Cornea—Dr. J. S. Hildreth, of Chicago.

On Excision of Joints for Injuries—Dr. J. B. Reed, of Savannah.

They also reported the following resolution, which was adopted:

Resolved, That those gentlemen who desire to report on special subjects, and will pledge themselves to report at the next meeting, be requested to send their names and the subjects they desire to report upon to the Secretary of the Association.

Dr. C. A. Lee, of New York, was appointed a delegate from the Convention to the meeting of superintendents of insane asylums.

Professor Henry, of the Smithsonian Institute, was invited to a seat on the platform.

The paper submitted by Dr. Joseph Jones on Albinism in the negro race, was recommended for publication from the Smithsonian Institute.

The thanks of the Convention were returned to the Baltimore and Ohio railroad; Philadelphia, Wilmington, and Baltimore

road; Orange and Alexandria, and other railroads, for facilities shown to the members of the Convention.

The thanks of the Convention were also tendered to the President of the United States, Speaker Colfax, Chief Justice Chase, Hon. Richard Wallach, Professor Samuel Gardiner, electrician United States Capitol; Dr. Woodward, of the Army Medical Museum; the committee of arrangements, of which Dr. Tyler is Chairman; and Hon. Edwin D. Morgan, for their politeness and courtesies to the Association. Also to the press of the city for the correct reports of the proceedings of the Convention.

The President appointed the following gentlemen as delegates to foreign medical societies: Samuel J. Jones, of Chicago; G. C. Blackman, of Cincinnati; Fordyce Baker, of New York; to which committee Dr. Gross, President of the Convention, was added.

The President read a letter from Hon. George Bancroft, our Minister at Berlin, relative to Professor Aaron Burke, the great microscopist, who is now blind.

On motion, Dr. Gross, the President, was authorized to send a letter on behalf of the American Medical Association, complimentary of Professor Burke.

Drs. Howard and Dunbar, of Baltimore, and C. A. Nichols, of this District, were appointed as a committee on the subject of marine hospitals.

Dr. Wetherly, of Alabama, spoke of the next meeting of the Convention, and declared that he had no doubt the members would be gladly welcomed and as hospitably entertained in New Orleans as at any place where they had ever met. [Applause.]

Dr. Gross then arose and spoke as follows: Before the question of final adjournment be put, allow me to tender you my cordial acknowledgments for the kindness and courtesy which you have extended to me as your presiding officer. Gratitude and good taste alike prompt the expression of my feelings. In everything I did I felt that I had your generous support and sympathy; whatever errors may have been committed were errors of the head and not of the heart, and are, I am sure, already forgotten by you. I congratulate you upon the manner in which you have conducted your proceedings. It is questionable whether there ever was a deliberative body of such magnitude in which there was so little discord, or so little said and done of an objectionable character. Harmony, cordial and complete, prevailed from the beginning to the end. There was, indeed, not one word uttered that any one, even the most fastidious,

might wish to recall; a circumstance the more surprising when it is recollected that men in the heat of debate often give way to heedless and unguarded expressions calculated to ruffle the feelings, and to engender unpleasant reminiscences. We have accomplished not a little work, and, above all, we have had an opportunity of reviving friendly feeling, of extending our acquaintance with each other, and of interchanging sentiments in regard to matters of vital importance to our beloved profession. I am sure that every one will say, as he leaves this hall, that it was good for him to have been here, and that he will return to his home with new resolves, and determined to devote himself more earnestly than ever to the advancement of the glory of his noble calling; that he will strive more than ever to elucidate its great principles, and that, abandoning all other pursuits, he will worship medicine as the only goddess of his idolatry. Hoping that no evil may befall you on your homeward journey, and that your families may greet you with messages of peace and glad tidings, I bid you a cordial and affectionate farewell.

The Convention then adjourned *sine die*.

THE EXCURSION TO MOUNT VERNON.

About noon yesterday, the fine steamer Arrow, having on board a large number of the delegates to the Convention, with a large party of ladies, left her wharf for an excursion trip to Mount Vernon.

The weather was delightful, the sun shone brightly, and from the arrangements which had been made, a very pleasant trip was anticipated. Professors Frank Malone and J. P. Spannier, with several members of Heald's Brass Band, were on board, and on the way down performed many choice selections. At Fort Washington, the fine brass band of that station, recently organized under the tutorship of Professor Blaw, embarked, and aided with their sweet music in adding to the pleasures of the day.

The boat with the excursion party arrived at Mount Vernon about 2 P.M., and at once all betook themselves to the task of seeing all that there was to be seen. The first place visited was, of course, the vault in which lie the remains of the Father of his Country, and his wife, Martha Washington. The mansion and grounds, and every point of interest in and around the place was glanced at hurriedly, of course, as but one hour was allowed, in order that the delegates could reach this city in time to leave by the evening trains. At 3 o'clock, the party embarked, and after the steamer was under way the delegates were called

together on the upper deck, when Dr. L. A. Sayre, of New York, addressed the meeting:

In leaving the hallowed spot where rests all that is mortal of the greatest and best of men—the tomb of Washington—is it not eminently befitting such an occasion that we should renew our vows of patriotic devotion at the shrine of him who is justly called "The Father of his Country?" The fervent prayer inspired in every loyal heart, while contemplating the scene before us, must be that the spirit which guided him through life may be kindled in each one of us. The principles of patriotic love of country, of unbounded fealty to the Union, which characterized the life of Washington, are bequeathed to us as the inheritance of every true American citizen.

The American Medical Association, organized for the purpose of promoting the best interests of the profession throughout the land, is governed by principles looking only to the good of humanity, and cannot possibly entertain sectional distinctions or geographical lines. We recognize all as our brethern. The example which as a body has been given, in choosing as our next place of meeting the city of New Orleans, is in itself worthy of imitation by those who profess, as national legislators, to have only the good of the nation at heart.

But to this we have added another evidence of the sincerity of our good will, for in conferring upon a citizen of the South the highest position the Association can offer, we have positively asserted our faith in the people of the South to stand by the Union, and to remain unwavering in their fidelity to the laws of the land. Let this be at least in some measure a lesson to those who are endeavoring to heal the wounds of the nation by political legislation.

Dr. N. S. Davis, of Chicago, the founder of the American Medical Association, was then called upon, and responded in an eloquent and patriotic address. He was followed by Dr. W. O. Baldwin, of Montgomery, Alabama, the President elect of the Association, who said that the medical profession of the South would henceforth be a unit in the work of the Association.

Appropriate addresses were also delivered by Drs. Hibbard, of Indiana; Hooper, of Massachusetts; Condie, of Philadelphia, and Harris, of New York city.

The recently invented steam guage of Mr. D. M. Greene, which has been placed in use on board of the steamer Arrow, was examined by the many scientific gentlemen present with a great deal of interest.

Shortly before the boat reached the wharf the following card of thanks was prepared, and after being signed by the distinguished gentlemen whose names are annexed, was presented to Mr. Sykes. The following is the card:

"We, the undersigned delegates of the American Medical Association, tender to Mr. James Sykes and Captain Thomas Stackpole, of the steamer Arrow, our sincere thanks for the kindness and courtesy shown to us in our visit to the tomb of the father of our country.

"The beautiful application of the science of chemistry which these gentlemen have applied to their boat in the 'thermometric steam guage,' the invention of Mr. D. M. Greene, rendering accidents from the explosive power of steam impossible, has given us a sense of security which has added materially to our pleasures."

Signed by Dr. N. S. Davis, of Chicago; Dr. W. O. Baldwin, of Alabama; Drs. H. N. Eastman; T. M. Hooper, of Massachusetts; Foster Hooper, Joseph Taber Johnson, Lewis A. Sayre, of New York city; J. H. Buckner, Henry A. Martin, T. J. Thomason, H. V. M. Miller, Joseph Swartz, John H. Packard, J. C. Dorr, J. F. Jarvis, S. S. Bates, G. W. Barr, H. J. Norton, J. P. Root, J. W. Hopton, H. A. Robbins, C. H. Bowen, Augustus Mason, J. M. Lazzell, J. M. Toner, C. D. Norton, Francis C. Condie, W. H. Pancoast, R. R. McIlvaine, Wm. F. Tomes, James F. Hibbard, J. W. H. Lovejoy, and Dr. E. Harris, whose name is familiarly known to the scientific world in connection with investigations on the cause of epidemics.

About half-past five o'clock, the boat with its precious freight arrived at the wharf, and the party disembarked, all expressing their great gratification at the very pleasant time enjoyed by all who participated in the pleasures of the day.

Messrs. Sykes, the proprietor, and Stackpole, the commander of the steamer, were unremitting in their endeavors to please all of their patrons, and to their exertions are due much of the satisfaction experienced by the excursionists on their trip.

The most of the delegates left the city last evening for their homes. We understand that all of the gentlemen who attended the Convention have expressed themselves highly pleased with the attentions received while on their visit to this city.

Book Notices.

Therapeutics and Materia Medica. A Systematic Treatise on the Action and Uses of Medicinal Agents, Including their Description and History. By Alfred Stille, M.D., Prof. Theory and Practice of Medicine, and of Clinical Medicine, in the University of Pennsylvania; Physician to St. Joseph's Hospital and to the Philadelphia Hospital; etc., etc., etc. Third Edition, Revised and Enlarged. In Two Volumes. Philadelphia: Henry C. Lea. 1868.

This, third edition of Dr. Stillé's very complete and valuable work on Therapeutics and Materia Medica, comes to us in two volumes, of over 800 pages each, good type, and good leather binding. The author seems to have carefully revised the whole work; and has treated of the following substances, not found in the previous editions, *viz.:* chromic acid, permanganate potassa, sulphites of soda, etc., carbolic acid, nitrous oxide, rhigolene, and calabar bean. It is certainly one of the best works on Materia Medica and Therapeutics in our language. For sale by W. B. Keen & Co., 148 Lake Street, Chicago.

Odontalgia, commonly called Toothache: Its Causes, Prevention, and Cure. By S. Parsons Shaw. Philadelphia: Lippincott & Co. 1868.

This is a neatly published duodecimo volume, of 258 pages. Its title clearly indicates the subjects treated in the work. It is written in pleasing style, and will well repay both physician and dentist for a careful perusal. For sale by S. C. Griggs & Co., Chicago.

Archives de Physiologie Normale et Pathologique. Publiérs par MM. Brown-Sequard, Chercot, Vulpian. No. 2 Mers. April, 1868. Avec 5 Planches. Paris: Victor Masson et Fils, Place de L'Ecole de Médicine.

This is the title to the second number of a bi-monthly journal, devoted to physiology and pathology, published in Paris,

by Brown-Séquard, Chercot, and Vulpian. Each number contains about 200 pages, and is illustrated by plates of the highest finish. To all who read the French language with facility, this would be an exceedingly interesting and valuable periodical.

Editorial.

American Medical Association.—In the present number of the Examiner, we devote a large amount of space to the record of proceedings of the recent annual meeting of the Association, in Washington. It is copied from the *National Intelligencer* of that city. The meeting was a very pleasant and profitable one, in all respects. The representation was more general from all parts of the country than for several years past; the Committee of Arrangements had provided excellent accommodations, both for the general meetings and those of the several sections; the reports and volunteer papers were more thoroughly considered in the sections; and the social entertainments were abundant and excellent, without intruding on any of the time required for the transaction of business.

The spirit manifested throughout was earnest, affable, and harmonious; vindicating the truly *national* character of the organization, and affording another demonstration that, in matters of science and humanity, there are no sectional lines. We trust the next meeting, which is to be held in New Orleans, will embrace a still larger delegation, and be actuated by the same spirit.

Annual Meeting of the Illinois State Medical Society.—The annual meeting of this Society was commenced in Quincy, May 19th, 1868, and continued two days. About sixty members were in attendance, and the time was devoted wholly to the transaction of appropriate business. Many of the committees, as usual, failed to report. Yet, there was a goodly number of reports and papers presented; they were more carefully

prepared, and received a more full and satisfactory consideration than for several years past. Dr. S. T. Trowbridge, of Decatur, was elected President, and Chicago chosen for the next place of meeting. A full record of the proceedings will be found in the next number of the EXAMINER.

SAN FRANCISCO MEDICAL SOCIETY.—The physicians of San Francisco have organized a medical society, and have elected the following named officers for the ensuing year: President, Dr. J. P. Whitney; First Vice-President, Dr. S. R. Harris; Second Vice-President, Dr. J. B. Pigné Dupuytren; Recording Secretary, Dr. Henry Gibbons, Jr.; Corresponding Secretary, Dr. T. M. Logan; Treasurer, Dr. A. G. Soule; Librarian, Dr. Wm. T. Garwood; Committee on Admissions, Drs. J. Haine, H. Gibbons, Senior, Thos. Bennett, W. P. Tilden, G. Hewston. The Committee on Admissions have held a meeting in the Twelfth District Court room, for the purpose of examining the credentials of those who desire to be enrolled as members of the society. Already between sixty and seventy physicians have given in their names, and there is little doubt that many more will come forward when the objects of the society are more fully known.

VIENNA, May 6, 1868.

The Medical School of Vienna, although less known in our country than that of Paris or London, undoubtedly ranks first in Europe, as regards its course of instruction and its means of illustration. The term of study is five years, the first two being devoted to the elementary branches of medicine and surgery, embracing, also, botany, geology, and comparative anatomy; the remaining three to the practical branches and clinics.

For the study of morbid anatomy, the pathological museum of Prof. Rokitansky is open. *Post mortem* examinations are also performed in the presence of the class. The department devoted to diseases of the skin, and under the direction of Prof. Hebra, is especially interesting. These wards furnished the originals for his series of lithographed plates, illustrating skin

diseases. Arrangements for bathing and steaming are provided, so that, when circumstances demand it, patients can be put through more courses than are required in a Turkish bath.

The hospital is built in the form of a square, enclosing a large court which, being laid out in graveled walks and ornamented with fountains, trees, and shrubbery, forms a beautiful park where patients may enjoy and exercise themselves in the open air. The entire hospital is capable of accommodating 2500 patients without crowding.

Ventilation is most carefully provided for, and, on entering the wards, no odor whatever is perceived. Exit for the light gases is obtained by flues passing out from the ceiling, at the ends of the ward. A similar provision below, carries off the heavy gases. Double windows, situated six feet apart, admit fresh air from both sides, and opening somewhat above the beds, prevent a direct current of air from striking the patient. The beds are placed in single rows on either side, while the centre is free and open. All parts of the building are thoroughly whitewashed several times a year. Erysipelas and gangrene are strangers in this hospital, and the healthy condition of wounds, and ready union after surgical operations, speak plainer than words of the purity and cleanliness of its wards.

Upon the wall, at the head of each patient, is hung a card, giving his name, age, diagnosis, and treatment of his disease, also, the diet he is receiving. The latter is as carefully attended to by the physician as the more direct medication. A complete record of treatment from day to day is thus preserved, for the observation of the student. Few men are employed in the hospital as nurses, that duty being performed almost entirely by females; they are well trained, and attend to their duties in a manner that cannot be excelled.

Medical clinics are held in the wards, at the bedside, and the students required to diagnose and treat the cases, under the professor. Amputations and all surgical operations, not requiring great skill, are performed by the student, under the direction of the surgeon. This is a practical teaching obtained in but very few schools.

For the study of surgery, diseases of women, laryngoscopy, and dermatology, the student will find Vienna offering very great advantages.

The galvano-caustic is much used. Combining the principles of the ecraseur and actual cautery, it is valuable in operating where hemorrhage is difficult to control.

Besides the General Hospital, Vienna has a large Foundling Hospital, where infants of uncertain parentage are received at any hour, day or night, and, as in the return of stolen property, no questions are asked. The moral influence of such an institution cannot be overestimated. It does not diminish or increase the number of illegitimate children, but it does prevent the destruction of hundreds. I do not think that all the preaching and legislating on the subject of infanticide has yet saved a single young one's life. Here, where provision is made for the reception and care of foundlings, the crime is seldom committed. It is not so much the destruction of the child that the mother desires, as the concealment of her own guilt. When we cannot abolish crime, it is our duty to prevent, as much as possible, its evil results. Experience, in this country, has shown that the foundling hospital is the only successful means of abating infanticide. Yours, truly,

J. S. SHERMAN.

THE undersigned beg leave to state that they are no longer connected with the institution called "Hotel for Invalids," on account of its departure from its original plan.

JOS. W. FREER, M.D.
E. C. ROGERS, M.D.
WM. C. LYMAN, M.D.

MONEY RECEIPTS TO MAY 27TH.—Drs. Henry Biroth, $3; B. F. Rolfe, 5; F. K. Bailey, 3; R. M. Boyer, 3; D. A. Sheffield, 3; H. C. Hutchinson, 3; Hiram Duncan, 6; Joseph Tefft, 5; Lyman Ware, 3; H. L. Smith, 3; D. S. Jenks, 3; T. Nichols, 3; B. F. Brown, 3; J. A. W. Hostetler, 3; A. Niles, 3; G. R. Bibb, 3; J. T. Frazer, 3; A. M. Maxwell, 3; E. Robbins, 3; R. D. Cogswell, 3.

Mortality Report for the Month of April:—

CAUSES OF DEATH.

Accident, drowned,	1	Enteritis	1	" chronic inflammation stomach,	1
" burns,	4	" acute,	1	Ovaritis,	1
" fright, bruises	2	Encephalites	1	Paraphlegia	1
" fall of floor,	1	Erysipelas,	2	Paralysis of lungs and heart following bronchitis,	1
" railroad,	1	" neck and face foll. sm.-pox,	1	Pericarditis complicated with pneumonia,	1
" scalded,	2	Fever, congestive	1	" " effusion,	1
" machinery,	1	" puerperal	5	Peritonitis	1
Anæsarca	1	" remittent	1	" metro	2
Angina pectoris,	1	" scarlet	3	Pharyngitis	1
Aorta, aneurism of	1	" typhus	1	Phthisis pulmonalisis	30
Apoplexy	4	" typhoid	7	Poisoned	1
Atrophy	1	Fungus hemadotes	1	Pneumonia	17
Birth, premature	8	Gastromalacia,	1	" complicated with measles,	4
" still	23	Hemorrhage, secondary	1	" " teething,	1
" tedious	1	Heart, disease of	1	Prostatic calculus and inflam'n of bladder,	1
Bowels, ulceration of, with abdom'l tumor,	1	" dropsy of,	1	Pyæmia	3
Brain, inflammation	2	" " pneumonia	1	Scurvy and encepaloid cancer of kidneys,	1
" disease of	1	" malformation of	1	Scrofula	1
" congestion of	2	" valvular disease	3	Small-pox	11
" œdema of, following pneumo.	1	Hepatitis	1	" complicated with pneumonia	1
" softening of,	1	Hydrothorax,	1	Skull, fracture of,	1
Bronchitis	3	Hydrocephalus	2	Suicide	6
Carries, of spine,	1	" acute,	2	Spine, disease of	1
Cancer of breast	1	Inanition	9	" fracture of	1
" of liver	1	Indigestion	1	Syncope from heart disease,	1
" of bowels,	1	Intemperance	2	Tabes mesenterica,	5
" of mouth,	1	Laryngitis	3	Tetanus traumaticus,	1
" of uterus,	2	Liver, tumor of	1	" " idiopathic	1
Cancer, of stomach	2	" induration of	2	Tedious labor,	1
Canker sore mouth	1	Lungs, congestion of	3	Teething	6
Catarrh	1	" emphysema of	1	Tumor, abdominal,	2
Convulsions	29	" inflammation of	1	" " and phthisis pulmonalis,	1
Croup	5	" paralysis of	1	Uræmia of scarlet fever	1
" membranous,	1	Manslaughter,	1	Varioloid	1
Debility	5	Measles	7	Whooping-cough	4
Diphtheria	6	Metritis,	1		
Diarrhœa	1	Meningitis	5	Total	305
" chronic,	2	" cerebro-spinal,	3		
Dropsy	1	" complic'd with scarlet fever,	1		
" chest	1	" tuberculosis,	1		
" complica'd with cardiac rheu'sm	1	Mitral valves, disease,	1		
" of spinal cord,	2	Nephritis	1		
" from heart dise.	1	Nicrosis of inferior mallary bone,	1		
Drowning	1	Old Age	5		
Dysentery,	1	" and pneumonia,	1		

Deaths in April, 1868, 305 | Deaths in April, 1867, 278 | Increase, 27

Deaths in March, 1868, 380 | Decrease, 75

AGES.

Under 5	144	40 to 50	21	90 to 100	0
5 to 10	20	50 to 60	18	100 to 110	0
10 to 20	14	60 to 70	11	Unknown	3
20 to 30	30	70 to 80	11		
30 to 40	30	80 to 90	3	Total	305

Males,	163	Females,	142	Total,	305
Single,	204	Married,	101	Total,	305
White,	301	Colored,	4	Total,	305

NATIVITY.

Chicago	126	England	9	Prussia	0
Other parts U. S.	52	Germany	42	Scotland	5
Bavaria	1	Holland	1	Sweden	5
Bohemia	5	Ireland	39	Unknown	3
Canada	8	Isle of Man	1		
Denmark	2	Norway	6	Total	305

DEATHS BY SMALL-POX.
For the Month of April, 1868.

4th Ward	1	12th Ward	1
5th Ward	3	15th Ward	3
6th Ward	1	Lake Hospital	2
7th Ward	1		
9th Ward—Varioloid,	1	Total,	35

MORTALITY BY WARDS FOR THE MONTH.

Ward.	Mortality.	Pop. in 1866.	One death in	Ward.	Mortality.	Pop. in 1866.	One death in
1	5	9,663	1,927 3-5	14	15	12,108	807 1-5
2	15	12,985	865 2-3	15	35	15,766	449 1-35
3	15	15,738	1,049 1-5	16	18	14,912	828 4-9
4	18	10,884	604 3-4	County hosp.	3		
5	19	9,610	495 1-4	Chica. River,	1		
6	13	10,680	813 11-13	Bridewell,	1		
7	43	18,755	436 1-6	Home of the Friendl's,	2		
8	14	10,429	745 0-0	Marine hos.,	1		
9	19	13,940	733 4-7	Mercy hos.,	3		
10	9	11,416	1,267- 1-3	St. Luke's hos.	1		
11	16	12,924	807 3-4	St. Jose. asyl.	3		
12	21	12,695	604 1-2	Lake Hosp.,	2		
13	13	8,188	629 11-13				
Total,							305

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FACULTY.

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W. H. BYFORD, M.D., Professor of Obstetrics and Diseases of Women and Children.

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JOHN E. DAVIES, A.M., Lecturer on Organic Chemistry and Toxicology.

H. A. JOHNSON, M.D., Professor of Diseases of the Chest.

J. S. JEWELL, M.D., Professor of Descriptive Anatomy.

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E. O. F. ROLLER, M.D., Assistant to the Professor of Obstetrics.

S. A. McWILLIAMS, M.D., Assistant to the Professor of Anatomy.

For the Winter Term, admitting to all the Lectures in the College,	$50.00
Graduation Fee,	.00
Matriculation Fee,	5.00
Dissecting Ticket,	5.00
Hospital Ticket,	6.00

The Summer Reading and Clinical Term commences on the second Tuesday in March, and continues until the first Tuesday in July; and is free to all matriculated Studens of the College. Boarding, $3.50 to $4.50 per week. For further information, address

E. ANDREWS, *Sec'y of the Faculty.*

MAP OF THE COURSE of CHOLERA FROM INDIA to EUROPE,

by John C. Peters M.D. of NEW YORK.

SUNDERLAND
SOUTHAMPTON
LONDON
MADRID
PARIS
GIBRALTAR
MARSEILLES
HAMBURG
BERLIN
COPENHAGEN
DANZIG
STOCKHOLM
RIGA
ST PETERSBURG
ARCHANGEL
RUSSIA
SIBERIA
VIENNA
WARSAW
SMOLENSK
MOSCOW
KASAN
KIEW
ODESSA
MOROCCO
ALGIERS
TUNIS
TRIPOLI
ANGONA
MEDITERRANEAN SEA
BLACK SEA
CONSTANTINOPLE
R. DON
R. VOLGA
R. URAL
ASTRACHAN
SARPTA
ORENBURG
INDEPENDENT TARTARY
DON COSSACKS
CASPIAN SEA
ARAB SEA
SMYRNA
ANGORA
TREBISOND
ERZEROUM
TURKEY
TIFLIS
ERIVAN
TAURIS
RESHT
KHIVA
BOKHARA
ALEXANDRIA
BEYROUT
ALEPPO
CAIRO
SUEZ
DAMASCUS
RASHIN
BAGDAD
BASSORA
TEHERAN
ISPAHAN
MESHED
HERAT
BALKH
KABUL
PERSIA
YEZD
SHIRAZ
PERSIAN GULF
BUSHIRE
EGYPT
KOSAIR
MEDINA
RED SEA
ARABIA
JIDDA
SUAKIN
MECCA
MUSCAT
PESHAWER
AFGHANISTAN
LAHORE
HURDWAR
DELHI
AGRA
CHINESE TARTARY
THIBET
NUBIA
YEMEN
MASSOWAH
MOCHA
MAKALLA
ABYSSINIA
ARABIAN SEA
BOMBAY
POONAH
HINDOSTAN
BUNDELCUND
ALLAHABAD
BENARES
PATNA
GAYA
CALCUTTA
JESSORE
DACCA
BURNGPORE
R. BRAHMAPUTRA
BIRMAH
NAGPOOR
CUTTACK
JUGGERNAUT
ARAGAN
RANGOON
BAY OF BENGAL
MADRAS
CONJEIVERAN
TANJORE
RAMNESERAM
CEYLON
CANDY
COLUMBO
INDIAN OCEAN

THE

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Original Contributions.

ARTICLE XXII.

ON THE ORIGIN OF CHOLERA IN HINDOSTAN, AND ITS CONVEYANCE TO EUROPE.

By JOHN C. PETERS, M.D., of New York.

It is well known that the great epidemic of 1817 commenced in the Delta of the Ganges, formed by the confluence of that huge river with the equally large Burrampooter. These immense rivers divide into innumerable branches, and empty into the Bay of Bengal, by almost as many mouths.

This land, called the Sunderbunds, lies so low that for hundreds of miles the whole country is almost a continuous swamp, intersected by numerous lagoons, from which fetid exhalations, caused by the rapid decomposition of animal and vegetable matters, rise and hang over the land like a dense fog. The sun seen through this noxious vapor loses none of its power, although it looks, even at midday, as if obscured by ground glass. The hot, damp, fetid air seems to clog and impede the free action of the lungs, and one feels instinctively that its impurities are pregnant with disease. The damp atmosphere of a hothouse, which has been shut a long time, is less oppressive and far more healthy than the normal atmosphere of the Sunderbunds. In addition, the huts of the natives are built on high artificial mounds, and cattle are frequently obliged to be housed under

the same roof with the family; often in the same room. It is only rarely that the mounds are large enough for the cattle to be left outside.

Still more unfortunately, throughout the whole of the year 1816, low fevers predominated throughout this entire district, because there had been no cold and dry season as usual, and naught but mists, fogs, rains, and sultry winds prevailed. The mortality in 1816 surpassed anything on record in the annals of Bengal. The English military stations wore a gloom hardly to be imagined. In many native villages the whole population was ill, and the shops were shut for want of people to attend them. The banks of the rivers were at all times covered with the dead and dying; many bodies were left unburied in the towns; and throughout Upper Bengal (near Patna?) the horned cattle were so sickly that their carcasses could be seen strewn in vast numbers in the pastures.

Common cholera-morbus, which has always prevailed more or less epidemically in the lower provinces of Bengal during the hot seasons, commenced much earlier during the first six months of 1817, and was more prevalent than in former years. In addition, one of those great religious revivals which take place among the Hindoos every twelfth year, fell upon the year 1817.

It is now well known that all junctions of streams, all places where great rivers empty into the sea, or where the waters of two seas mingle, are held in great veneration by the Hindoos, who make huge pilgrimages to them at least once a year. The principal holy places in the Delta of the Ganges are Songar Island, at the mouth of the Hooghly, just below Calcutta; the islands at the mouths of the Brahmapootra, where it divides into the so-called Megna and Hattia rivers; the junction of the Ganges and Brahmapootra rivers, at or near the great city of Dacca; Kishnagar, at the junction of the Ganges and Jellinghy rivers, and only 70 miles north of Calcutta. Further up the river the remarkable mountain Junghera rises like an island from the majestic Ganges, and was formerly considered the holiest spot along the whole course of the river, so that thousands of boats and larger vessels were constantly to be seen

there, as many Hindoos thought they could not die in peace without visiting it. Still further north, at the great city of Patna, a fair is held annually, which attracts a vast concourse of people to its festivities. A short distance south of Patna is Gaya, the supposed birthplace of Buddha, the scene of Vishnu's incarnations, and visited annually by vast numbers of pilgrims.

Whenever cholera is brought to, or originates at, these places, its intensity is very much increased by the filth of the innumerable pilgrims who then congregate together. Thus the extreme point of Songar Island, at the mouth of the Hooghly, is believed by some Hindoos to mark the junction of the Ganges with the sea, and they accordingly esteem it one of the holiest spots in Bengal, and flock thither every spring in vast numbers, for the purpose of bathing and offering sacrifices. There is much reason for the belief, that this island was one of the first great centres of cholera in 1817, and that the disease was carried up the Hooghly both to Calcutta and Jeypore, although both of these cities are always filthy enough to generate cholera within their own limits. At least, it is now well known that the disease was in Calcutta in the first week in August, and did not reach Jeypore, 100 miles to the north-east, till the 28th of the same month. But it was in Kishnagur, 70 miles north of Calcutta, in May and June, and may have been carried from there down to Calcutta, and over to Jeypore, which is only 50 miles east. Again, it was in the city of Patna, 350 miles up the Ganges, as early as the 11th of July, and may have originated there, or have been brought to it from Gaya or Jenghira.

We have also to mention that large numbers of the Hindoos do not regard the Hooghly River as the true Ganges, but place the mouth of this river much farther east, towards the province of Arracan and the kingdom of Birmah, and perform their pilgrimages to the islands at the mouths of the united Ganges and Brahmapootra rivers, near the great rivers Megna and Hattia. From there cholera was carried up the river to the province and city of Dacca, early in July; first appearing at Sunergong, a town on the banks of the great river Megna; thence proceeding north, visiting the ghauts, public ferries, and grain markets in

its way. From Dacca, it was carried north-east to Sylhet, by the 17th of August, and reached Rungpore, high up the Brahmapootra river, towards Thibet and the western part of China, by the 15th of October.

From the united mouths of the Ganges, Burrampooter, and Megna rivers, it was also carried far around the eastern Bay of Bengal to the city of Chitagong, by the 23d of August, and from thence down to Arracan, to Rangoon in the Burman Empire, and to Bankok in Siam.

Hence we can readily agree with James Johnson, that "there are facts more than sufficient to show the fallacy of every theory which attempts to derive the disease from any one local source, or to trace it to any one particular spot as the centre from which alone it was emitted to the surrounding country." The facts prove, without the possibility of dispute, that it broke out at very remote places at nearly one and the same time, or at great distances at such intervals of time as to establish the impossibility of the pestilential virus having originated at any one place exclusively. James Johnson says, "It is clear to demonstration, that it did not originate in Jeypore alone, on August 28th. On the contrary, there is as good, and indeed better, reason to suppose that it was carried to Jeypore, which was merely the first place that was distinctly heard from. Thus there is little doubt that it visited some spots of the town of Calcutta and suburbs as early as the beginning of August; that it daily gained ground, and before the end of the month had widely spread its ravages."

The great religious festivals in Hindostan take place, some in February and March, others in April of every year. It is enough to say that epidemic cholera evidently broke out in May or June, 1817, soon after these festivals and after seasons remarkable for irregularity, and a preceding year distinguished for epidemic sickness and mortality. Near a sacred and filthy river it was born, and at the most sacred and filthy spots on this river, in the Delta of the Ganges. For rivers and filth it has ever subsequently testified a strong regard, especially for the large and dirty towns on such rivers, and for the centres of commerce, business fairs, and religious festivals.

From Patna the disease passed up the Ganges to the holy city of Benares, and from there to Allahabad, the city of God. The latter city is almost wholly given up to idolatry, and has ever been celebrated for the pilgrimages of pious Hindoos, attracted to a spot blessed by the junction of two sacred rivers, the Ganges and Jumna. It is esteemed holy by all castes, who annually repair in crowds to bathe themselves in the united streams. In former and more barbarous times, the junction of the Ganges and Jumna was the scene of fearful human sacrifices every year.

We have seen that cholera has always followed the routes to and from sacred rivers and places; but these are so numerous in Lower Bengal, that its course seemed for a long time both confused and erratic. At Allahabad, which it either reached in March, 1817, or broke out spontaneously, just after the great festival, which always takes place in February, even that stanch anti-contagionist, Dr. James Johnson, of the *Medico-Chirurgical Review*, is obliged to admit that "the epidemic began clearly to show one of its most striking peculiarities, which subsequently characterized its march. It no longer seemed to push its influence without distinction or apparent choice in all directions, and throughout every tract coming in its way; but began to affect particular lines, and to fix itself in particular divisions of the country; wholly restricting itself for the time to the course of those lines and divisions."

From Allahabad the disease passed north, along three great lines: first, along the river Jumna, up to the great cities of Delhi and Agra; second, along the Ganges, up towards its source; third, along the great trunk road, between the two rivers, through the towns of Coel and Meerut, directly towards HURDWAR. It is very interesting to notice that another stream of cholera was in all probability coming down from the great festival at Hurdwar, as the Bengal report says: "It is very curious that Muttra, situated considerably higher up the river Jumna than Delhi and Agra, should have had the disease in the beginning of June, whilst the latter place was not visited till the 1st of July. As the Punjaub, or extreme north-western

province of Hindoostan, did not fall into the possession of the British till many years later, the progress of this epidemic could not be traced farther to the north. All the subsequent pestilences have been.

There is a great nursery of cholera at Hurdwar, at the source of the Ganges, near the foot of the Himalaya Mountains. From thence the disease is often carried down that river to Allahabad and other places. But it is also always carried north, through the great town of Lahore, up to Attock, where the Cabul River joins the Indus, and from there to Peshawur, the north-western border town of Hindostan. All the trade of Russia, Persia, Independent Tartary, Cabul, and Afghanistan, with Hindostan, comes to Peshawur and Attock; for these places are situated at the only break or pass in the Himalaya Mountains, for the space of over 1000 miles. 8000 men, 10,000 oxen of transport, and 30,000 camels are employed in this traffic. From Peshawur the road leads to the city of Cabul; there it divides in two: one leading due west to Herat, from there to Meshed, and thence to Teheran, where it meets the great route which comes up the Persian Gulf to Bushire, Shiraz, and Ispahan to Teheran, and thence on to Trebisond, Odessa, and Astrakan.

The other passes north-west from Cabul to Balk, and from thence to Bokhara and Khiva. From the latter place, one stream of trade and travel crosses to the Caspian Sea to Astracan; the other passes up between the Aral and Caspian Seas to Orenburg, on the Ural River, the great border town of Russia.

To return to Allahabad. We find that the great province of the BUNDELCUNDS lies due south of this city; and the great war against the Mahrattas was being conducted by the Marquis of Hastings with 90,000 men, in the year 1817. 10,000 natives had already died in the city of Allahabad, when on the 6th, 7th, or 8th of November it made its appearance in the army. "After creeping about in its wonted insidious manner for several days, among the lower classes of camp-followers, it, as it were in an instant, gained fresh vigor, and, at once, burst forth with irresistible violence in every direction. The natives, thinking their only safety lay in flight from the army, now began to desert in

great numbers; and the highways and fields, for many miles around, were strewed with the bodies of those who had left the camp with the disease upon them, and speedily sunk under its exhausting effects. The line of march of the army presented a most deplorable spectacle. Although most, even of the ammunition carts, were used as ambulances, the sick were soon too numerous to be moved, and the greater part were left behind to die unattended. Many who left the carts, pressed by the sudden calls of the disease, were unable to rise again, and were abandoned. Hundreds dropped down during every subsequent day's advance, and covered the roads with the dead and dying. The places of encampment and the lines of march presented the appearance of a field of battle and the track of an army retreating under every circumstance of defeat and discomfiture. In less than two weeks, nearly 9000 men succumbed to the pestilence."

While this dreadful havoc was going on, a subsidiary force was sent up from Bombay, through the towns of Poonah, Seroor, Jaulnah, Ahmednuggur, and Amungabad, to the great city of Nagpore, lying due south of Allahabad and the Bundelcunds. The disease reached Nagpore from the Marquis of Hastings' army, through the cities of Huttah and Jubbelpore, pursuing a due southerly course; and the subsidiary force coming north under Colonel Adams, afforded the first striking instance of a large body of men coming into the pestilential medium, and from the previous enjoyment of perfect health, falling, at once, into a wretched state of sickness. When nine miles south of Nagpore, it had hardly learnt that the epidemic was raging in the city and vicinity, when it began itself to experience its unwelcome visits. 70 cases and 20 deaths occurred on the first day. Many were attacked while loitering for water at the neighboring contaminated rivulets, and some were brought in expiring, others dead.

From NAGPORE, it passed down to Jaulnah, the next town in order towards Bombay, in the south-west. The course of the disease had long been so regular along the line of much-traveled roads and the marches of troops, that the Bombay author-

ities concluded, "when it showed itself at Jaulnah, it was pretty clear that it would reach Bombay," although many hundred miles off. It was well known that it had "reached Jubbelpore, north of Nagpore, by the 9th of April. It arrived in Nagpore in May; was carried down to Jaulnah in June, by a detachment of troops that was marching from Nagpore to Jaulnah and Aurungabad; then passing over a space of 220 miles, visiting Aurungabad and Ahmednuggar in its course, it reached Seroor, 150 miles farther to the south-west, on the 18th or 19th of July. It appeared at Poonah towards the latter end of the same month. On the 6th of August, it broke out with great violence at Pantrell, a considerable village on the main line of communication between Poonah and Bombay, and distant about 20 miles; and on the 9th or 10th of the same month, the first case in Bombay occurred in a man who had arrived from Pantrell the same day. The disease could be traced as if creeping along from town to town, village to village, and from place to place, by the arrival of people affected with the disease from places where the disease was known to prevail."

Cholera prevailed severely in 1818 and 1819 in Bombay, and then moderately for several years, but in 1821 it broke out again in its most mortal and malignant form. 800 British troops, under Captain Thompson, were sent to the Island of Kishme, at the entrance of the Persian Gulf, and from there sent in the rear of Muscat, to coöperate with the Iman of that place; but they were massacred by the Bedouins, so that only 150 escaped back to the city. 3000 more troops were sent from Bombay, under Sir Lionel Smith, and cholera was introduced by them to Muscat and carried up the Persian Gulf to Bushire and Bassorah, the only ports of any importance on that sheet of water.

Bushire is not only the principal, but the only port of Central Persia, and the communication with Shiraz is incessant. Many writers say that it was transported by travelers from the former to the latter place; and 6000 persons died of it in 18 days. From Shiraz it was carried to Yedz and Teheran, and from there to Resht, at the foot of the Caspian Sea, and from there to Astrachan.

Teheran has always been a great centre for the distribution of the disease. It was carried both from Teheran and Ispahan to Kasbin, in July, 1822, to Tauris in September, and extended immediately to Erzeroun, and from there to Trebisond, on the Black Sea.

Bassorah is, also, the principal and only port at the head of the Persian Gulf. Cholera appeared there with extraordinary violence in 1821, as from 15,000 to 18,000 persons died in 18 days. From this city, it was carried by boats and caravans up the river Tigris to the great city of Bagdad, which became infected, together with the surrounding country. A Persian army at this time menaced Bagdad, and defeated the Turkish force which was collected for its defence. A few days after the victory, the Prince Royal of Persia saw his army devastated by the epidemic, and recoiled before this new enemy; but carried the disease into the centre of Persia from this new direction. He lost 2000 soldiers in one march, and when the army reached Kasbin and Tauris, from 30 to 40 were dying each day.

Thus cholera was introduced into Tauris both from Teheran, Ispahan, and Bagdad, and one-half of the whole population, or 4800 persons, died in 25 days.

From Tauris, the disease was carried up between the Black and Caspian Seas to Tiflis, and again to Astrakhan, where it had already arrived from Teheran and Resht.

From Bassorah, the epidemic also extended up to Aleppo and Damascus, near the Mediterranean coast.

Every successive epidemic of cholera has always been carried from Bombay up the Persian Gulf, and thus reaches the Mediterranean, Black, and Caspian Seas.

Trebisond is the only port at the south-eastern end of the Black Sea, as the whole eastern shore is shut in by high mountains. The trade and travel of Persia to the Black Sea must go there, and cholera always follows in their train. From Trebisond the disease has frequently been carried both to Odessa and Constantinople. This was the case in 1830, and notably so in 1847, when the first case in Constantinople occurred in a passenger from a ship just arrived from Trebisond, where chol-

era and cholerine prevailed. In 1854 and 1865, the disease reached Constantinople first, and was carried from thence to Trebisond.

From Odessa, the disease has repeatedly been carried west to Vienna, and thus distributed to South Germany.

It is well known how often cholera has been carried up the River Volga to Moscow, and from thence distributed to Riga, the principal Russian port on the Baltic, and to St. Petersburg. It is also well known how often the little Moravian town of Sarepta has escaped the disease, in consequence of strict quarantine and great cleanliness. Five epidemics of cholera have passed by it, and none has ever entered its streets, although it is situated in the most dangerous place imaginable, *viz.*, near the great elbow which the River Volga makes towards the west and approaches very near the River Don, which makes an equally large curve towards the east, so that the two great rivers touch each other very nearly. The trade and travel between the Don and Volga are very great at this spot, and the disease is always carried over from the Volga to the Don at this place, yet Sarepta always escapes. In 1830, over 40,000 Don Cossacks died in the small corner embraced by the lower ends of these two rivers, yet Sarepta saved herself.

In 1831, a great Polish insurrection took place, and many battles were fought in the neighborhood of Warsaw. Don Cossacks carried the disease through Kier to Warsaw; another stream of cholera came up from Odessa; and a third was conveyed from Moscow, through Smolensk to the rear of Warsaw, and carried down the River Vistula to Danzig, on the Baltic. While many precautions were being taken at Danzig to prevent infection from Riga, the disease slipped in at the back door. From Warsaw, the epidemic spread west through Posen to Berlin, and from thence to Hamburg, and from there to London.

While Vienna was surrounded by a triple cordon of troops, to prevent cholera reaching it from Warsaw and Cracow in the north, it slipped in from Odessa in the east.

To return to India, we find that Bombay not only forwards cholera up the Persian Gulf, but also up the Red Sea, and

notably to Jedda and Mecca. Jedda is the port of Mecca, and all the pilgrims who come by water land there; its streets are crowded with Turks, Egyptians, Arabs, Persians, Affghans, Algerines, people from Tunis and Tripoli, Hindoos, Nubians, Abyssinians, and Negroes of every shade. Crowds of poor Hindoos litter the streets like dogs; they have performed their pilgrimage to Mecca, but are destitute of means to return home. The English consul is often obliged to give 6000 free passages on merchant vessels which sail for Bombay every autumn; yet hundreds and thousands of families live in the streets until they can obtain passages; although small brigs of only 200 tons have carried as many as 270 persons. In 1831, Jedda had 10,000 tons of shipping, and as much more in large boats, engaged in this pilgrim trade, and soon collected together a more motley assemblage of human beings than is found on any other spot on the globe; 20,000 came from Egypt alone; 120 boats were employed in carrying those from Turkey and the Barbary States, through Suez to Jedda; the pilgrims from Abyssinia, Nubia, and the interior of Africa crossed the Red Sea, from the ports of Cossier, Suakin, and Massuah; 4000 came from the Persian Gulf, principally from Muscat, Bushire, and Bassorah; 2000 came from Malay; 3000 from Mocha and Southern Arabia. Besides all these, six great caravans came: one from Cairo and Suez; another from Damascus, Syria, and Asia Minor; a third from Bassorah; a fourth from Bushire, across the Persian Gulf to Bahrein, and thence through Central Arabia; a fifth from Muscat; and the sixth from Yemen. The cholera of 1829 was rightly supposed by the Arabs of Jedda to have been brought up by the Hindoos from India; but it was not until the whole multitude had assembled at Mecca that it reached its utmost violence. Over 60,000 pilgrims died, and among them the Governors of Mecca and Jedda, the Pasha of the Persian caravan, and many people of distinction. The dead were thrown by hundreds into large pits, and the road from Mecca to Jedda was strewn with the dead and dying for weeks. The disease followed the pilgrims in their return passage up and down the Red Sea, and notably so to Yembo, Suez, and Cairo,

which were attacked successively, as the pilgrims arrived at them. Lieut. Wellstadt, who spent five years on the Red Sea in English government surveying ships, found the halting-places of the pilgrim boats covered with dead bodies and graves. This is the way the disease always reaches Suez and Cairo, and from thence is carried to Alexandria on the Mediterranean coast. Alexandria is now the great centre and distributing port for the conveyance of cholera to Europe. From there it is carried to Beyrout, in Syria; to Smyrna, in Asia Minor; to Constantinople, in Turkey; to Ancona, in Italy; to Marseilles, in France; to Southampton, in England; and to Tripoli, Tunis, Algiers, and Morocco on the northern coast of Africa, and the south side of the Mediterranean Sea.

We have seen how cholera is brought to Alexandria from Mecca, in the East; we will now show how it is distributed along the Mediterranean to the West. Almost all the English, French, Austrian, and Italian steamships which sail on the Mediterranean carry pilgrims to Alexandria from Morocco, Algiers, Tunis, Tripoli, Malta, Turkey, Southern Russia, Asia Minor, etc., etc., in time to partake in the festivities of the *Kurban Bairam* at Mecca. For this trade yields considerable profit at little cost. In 1863, as many as 10,000 pilgrims were conveyed in British ships alone, between Alexandria and one or the other ports of Northern and Western Africa. We will record the experience of one steamer stopping at Tangier, opposite to Gibraltar: "Crowds of the dusky tents of the Hadji, or pilgrims, were seen upon the beach. The next day, from dawn to sunset, large boat-loads were poured on board, with their bags of millet, cracked wheat, little cooking stoves, charcoal, and their water-bags, to the number of 2000 persons. The night came on boisterously; the skies poured down torrents of rain; the burdened vessel plunged among the waves, shipping many heavy seas, till all were drenched and soaked, and their provisions damaged. Above the howlings of the storm arose the piteous cries of the pilgrims, as the great seas broke over them.

"It is a point of religion for these pilgrims to carry no

change of raiment with them, and added to the filth of their wet and unchanged garments, there was soon added the ordure of 2000 men, women, and children kept closely packed together on deck for a fortnight, with nothing provided for their relief, but an extemporized stage of planks projecting from the vessel's side, upon which few landsmen could venture, even in moderately calm weather. The constant wash of the rain and sea alone carried away much of the filth, which, otherwise, would have been unbearable. Small-pox broke out, and several deaths occurred before arrival at Malta, but passengers and sailors combined to deceive the captain, from fear that he would report it and have his ship quarantined. The deaths are comparatively few on the voyage out, but on the return passage, when all are exhausted and worn out, as many as one-third have been known to die. Then their companions push them into the sea the moment they cease to breathe, if they can do so unobserved; or else cover over their bodies and sit upon them, like bags, until a convenient opportunity occurs.

"Every evening, when the weather permitted, prayers were said, and short passages from the Koran recited. First, the pilgrims stood unshod, bowing together, then dropping upon their knees, pressed their foreheads upon the deck in such lowly attitudes that it was difficult to resist the impression that every creature of them was not reverently humbling himself in the dust before his Creator. Finally, one evening, when the sun was was set, every face was found intently turned in one direction, and the heavens were searched by keenly peering eyes; soon, a slight thread-like arc of faintest silvery light marked the appearance of the new moon, with the arrival of which the "*Kurban Bairam*," or *Feast of Sacrifices*, begins. Shouts, clapping of hands, and the gleaming brightness of every eye announced that all had seen the sight, which marks the anniversary of the time when Abraham attempted to offer up Isaac, or, as the Mohammedans believe, his first-born, Ishmael, their great progenitor; and when a ram was miraculously supplied and sacrificed in his stead. It is the commemoration of this event which draws such crowds to Mecca every year; and notably, every twelfth year.

For at Mecca is situated the well Zem Zem, which Hagar and Ishmael found when fainting with thirst in the wilderness, and thus saved the lives of the founders of the Arab and Mohammedan races. Abraham, it is also claimed, paid annual visits to Hagar at Mecca, on this anniversary, up to the time of her death, notwithstanding the reluctance and jealousy of Sarah.

ARTICLE XXIII.

SODÆ SULPHIS AND HYPOSULPHIS IN THE TREATMENT OF VARIOLA AND VARIOLOID.

By WILLIAM H. PRICE, M.D., Danby, Ill.

Since Prof. Polli's admirable treatise upon the use of the sulphites and hyposulphites in the treatment of zymotic diseases has been laid before the profession, I have been fully determined to test the value of these remedies in the treatment of small-pox, as soon as an opportunity should occur; and since that opportunity has already presented itself, in which my expectations of those remedies have been fully realized, I thought a brief description of the following cases might not prove uninteresting to the many readers of your valuable journal:

Case I. Jan. 17, 1868, was called to see Patrick B., aged 25, by occupation a daily laborer, and who, as I was informed by the messenger, had been bleeding furiously all the previous night from the right nostril. On my arrival, and after having been introduced to my patient, I immediately recognized the case as being one of discrete variola, which was just entering the stage of suppuration, notwithstanding the patient had been vaccinated while a youth.

On questioning the patient closely, I soon learned that he had been exposed to small-pox in Chicago, and had already passed through the febrile and eruptive stages.

The symptoms of the case were as follows: The whole system was in a state of profuse perspiration; the eruption had ex-

tended itself pretty thoroughly over the whole body and extremities, some of these pustules on the chest and neck measuring nearly half an inch in diameter; pulse ranging from 80 to 100; bowels rather constipated; tongue coated; appetite poor; urine natural, though passed in unusual quantities. The epistaxis, which amounted to three or four quarts during the previous night, arrested itself towards morning by a plug of coagulated blood, which I ordered not to be disturbed until the following day, when it came away while the patient was being washed, without any further loss of blood.

The fearful epistaxis, together with the extensive eruption and suppuration, gave the patient a rather deplorable aspect.

I immediately prescribed a saturated solution of equal parts of sulphite and hyposulphite of soda, to be taken in teaspoonful doses every three hours until the bowels were freely opened, when the hyposulphite should be discontinued and the sulphite continued, *ad libitum*, until my next visit. In addition, I ordered a generous diet, with strict cleanliness and free ventilation.

Jan. 18. Found the patient very much improved, both physically and mentally. Rest good; head clear; no return of the epistaxis; urine not secreted in such large quantities; pulse 70; bowels open; appetite rather better; with some tendency to perspiration still remaining. I omitted the hyposulphite, but continued the sulphite in the usual large doses.

Jan. 19. Patient improving rapidly, with a decided improvement in all the symptoms. The stage of desiccation is now fully inaugurated. The appetite and sleep is now good, and the patient's spirits very much elated. Ordered the sulphite of soda to be continued in large doses. I informed the patient that I would again visit him in three days.

On the second day after my last visit, the patient despatched a messenger to inform me that my services were no longer required, for the reason that he (the patient) was able to be about the house, and was feeling quite well. He, however, continued to take the medicine for several days, after which he called at my office, stating that he was as well as ever, having made a perfect recovery without being marked in the slightest degree.

Case II. Was called, Jan. 30, 1868, to see Mr. Charles P., aged 30, and a lawyer by profession, who was complaining of a severe pain in the head and spinal column, accompanied with slight chills and fever.

On questioning this patient closely concerning his previous history, I was informed that he had been during the years 1865 and 1866 very much exposed to the malarial regions of Kansas and Oregon, and had suffered at that time from a severe attack of ague, from which he thought he had never entirely recovered. On further inquiry, he stated that he had been exposed during the week to severe cold, and more especially during the night of the great fire in Chicago, which, taking into consideration the existing symptoms, was sufficient cause in my mind to give rise to a renewed attack of the old complaint. Having previously used the hyposulphites in cases presenting these symptoms, I accordingly ordered the hyposulphite of soda in 10 gr. doses, in solution, every four or six hours.

Jan. 31. Found the patient very much improved, having been relieved entirely of the chills and the pain in the back and head. At this visit, a very slight eruption was noticed upon the forehead, which the patient stated he had noticed on previous occasions after having been attacked by ague. The same treatment was continued.

Feb. 3. Found the eruption more fully developed upon the forehead and face, and just making its appearance upon the body and extremities, and presenting all the characteristics of the eruption of varioloid. The patient's bowels being now rather loose, the hyposulphite of soda was discontinued and the sulphite ordered, in large doses, every four hours, together with liberal diet and well-ventilated apartments.

Feb. 4. Found the eruption more fully developed upon the body and extremities, with a slight appearance of the stage of suppuration on the forehead and face. The symptoms present at this visit confirmed my diagnosis. All the functions seemed to be regular, and the patient was able to sit up and walk about his room. The sulphite was continued.

Feb. 6. Found the patient passing rapidly through the stage

of suppuration, and on some portions of the face verging upon the stage of desiccation, without any unfavorable symptoms whatever. The sulphite was continued in the usual large doses. From this time forward, the patient made a rapid recovery, and in a few days made his appearance, without a mark of the disease to be seen.

CASE III. Feb. 16, was called to see Mrs. B., aged 38, the mother of five children, was suffering somewhat from pain in the head and back, and nausea and vomiting, during the evening of the 14th. Feb. 15th. Severe pains in the head and back continued, together with high fever and quick pulse. Feb. 16th, the day on which I first saw the patient, I did not make a positive diagnosis, although there was a slight eruption to be seen on the forehead and arms. Pulse was very quick; bowels rather loose; tongue coated; urine natural in quality and quantity; pain in the back and head very severe. I immediately prescribed sodæ hyposulphis, in from 5 to 10 gr. doses, every three hours. On the evening of the 16th, the bowels were very loose; fever quite high; pulse 110; pains severe in the loins, back, and head. An anodyne was ordered, to relieve pain and to produce sleep, as well as check the bowels, which were now quite loose. The hyposulphite was continued.

Feb. 17. The previous night was passed without sleep, and without any amelioration of those severe symptoms already described. Pulse was 120. The hyposulphite was then ordered to be discontinued, and potass. bromide, in saturated solution, to be given in teaspoonful doses every three hours, until the pain should be somewhat relieved and sleep produced. During the evening of the 17th, the patient expressed herself very much better, those severe symptoms being, in a great measure, relieved. Ordered the potass. bromidi to be continued all night.

Feb. 18. Patient entirely relieved of pain, after having had a good night's rest. The stage of eruption was now fully inaugurated, and I then was positive that I had a case of semi-confluent small-pox to deal with, and informed the patient and friends accordingly. The potass. bromidi was discontinued,

and the sulphite of soda ordered to be given in ℈ doses, every two or three hours. The body to be sponged with tepid or cold water; room to be well ventilated; together with generous diet and plenty of ripe fruits. I must now add that the menses made their appearance, which contributed largely to weaken the patient.

Feb. 19. The stage of eruption is fast progressing, being on the face and forehead of the confluent, and on the body of the discrete variety. Appetite is very fair, and patient rests well; pulse 80; bowels regular; very little perspiration. Ordered an infusion of prunus Virginiana to be given with the sulphite.

Feb. 20. Stage of eruption seems to be nearly completed. Patient passed a good night; bowels regular; tongue not coated; appetite very good; head a little confused; throat somewhat sore; feet and hands a little swollen; pulse 70. Patient complains to-day of excessive salivation, although she has taken no medicine which would produce such symptoms since the invasion of the disease. The same treatment was ordered to be continued.

Feb. 21. Patient seems to be as comfortable as yesterday, excepting the difficulty of deglutition, which is somewhat aggravated. Pulse 75; bowels regular; tinnitus aurium not quite so bad to-day; face considerably more swollen to-day than yesterday; appetite is very fair. Patient's face and forehead is now one solid mass of eruption. The stage of suppuration seems to be now setting in, accompanied with intense fever, and a burning sensation over the surface of the face and head. Menstruation still continues, although not accompanied with so large a flow of menstrual fluid as yesterday.

Feb. 22. Stage of suppuration is progressing slowly on some parts of the body, while the eruptive stage does not seem to be quite completed on other parts. The swelling on the face, forehead, hands, and feet seems now to be at its height. Pulse and bowels regular, appetite good, and rest at night better than heretofore. In addition to the sulphite and infusion of wild cherry, which has constituted the principal treatment since the invasion of the disease, a pill of from 3 to 5 grs. of assafœtida

is ordered to be taken *ter die*. The patient is allowed to be sponged with whatever fluid substance seems to afford her the most relief; sometimes with cold water, but oftener with sour milk. The menses have now ceased to flow.

Feb. 23. Patient is in good spirits. Stage of suppuration is now progressing rapidly, especially upon the body and limbs. The itching and burning sensation upon the face, forehead, and head, which has so much annoyed the patient, is now transferred to the body and limbs. The appetite is good, bowels regular, etc., etc. The same treatment is continued.

Feb. 24. Stage of suppuration is now being rapidly completed. The stage of desiccation is making a very slight appearance on the forehead. There is considerable hoarseness, caused by laryngeal and bronchial irritation. The appetite is very good. The patient has not, as yet, shown any symptoms of depression and exhaustion, either in mind or body, but, on the contrary, manifests considerable vitality. The mucous membranes are now very much involved: those of the nose, mouth, larynx, and trachea being the seat of an eruption. The tongue and palate have become covered with vesicles. The throat is quite sore, there being considerable hoarseness and some difficulty of deglutition.

Feb. 25. Patient presents symptoms of drowsiness; otherwise appears to be doing well. The urine was examined, and found to contain albumen in a moderate quantity. The swelling of the parotids, face, and eyelids is somewhat subsiding. The lingual, laryngeal, and bronchial irritation is not so great as it was yesterday and the day before. The stage of desiccation is showing itself more clearly upon the forehead and head. Pulse 80, bowels regular, and the urine is passed in the usual quantity.

Feb. 26. The patient is apparently doing well. The swelling of the face, eyes, and parotid glands is rapidly subsiding. All of the organic functions seem to be performed as well as they can under the circumstances. The appetite is quite good, and the bowels are open. The patient is allowed to partake freely of ripe fruits and well-cooked vegetables. The stage of

desiccation has not set in upon the body and limbs, but is pretty well established upon the face and head. The treatment is now equal parts of the sulphite and hyposulphite of soda, the latter being given in conjunction with the former for the double purpose of keeping the bowels in a soluble condition, and furnishing to the blood a powerful catalytic. The assafœtida pill is continued *ter die*, together with the infusion of the prunus Virginiana.

Feb. 28. Patient improving rapidly. The stage of desiccation is pretty well advanced upon the face and head, but just commencing upon the body and limbs. The patient has not, as yet, the slightest symptoms of delirium or convulsions. The appetite is very good; the bowels are very regular; the urine is passed freely and normally, although still containing slight traces of albumen. The hyposulphite is continued, but the sulphite discontinued, in order to insure regularity of the bowels.

Feb. 29. Found the patient doing remarkably well. All the functions are regular, and there is every appearance of a tolerable amount of strength and vitality in the system. The stage of desiccation is rapidly progressing. The same treatment is continued.

March 1. Found the patient doing well in every respect. The stage of desiccation is pretty well advanced; the crusts are falling off rapidly; the appetite and sleep are good. The urine was to-day examined, and found to contain no albumen. The patient appears to be convalescing without any unfavorable sequelæ whatever. The same treatment continued.

March 6. Patient has been doing well since last visit. The crusts have nearly all fallen off, except those upon the arms and lower extremities. All the functions seem to be quite regular; sleep and appetite very fair. The patient complains of weakness in the back and joints, and some general depression, in consequence of which the hyposulphite is discontinued, and tonics are ordered in its stead, together with generous diet.

March 10. Patient able to sit up most of the day in a chair. Appetite is very good. Patient complains of being very weak in the joints, especially of the lower extremities. The tonic treatment is continued.

March 15. Patient improving very rapidly. From this time forward, the patient continued to improve in strength under the tonic treatment, and in a few days was able to attend to her household duties with as much vigor and energy as ever.

CASE IV. Eugene B., aged 4 years, son of Mrs. B., was complaining March 1st, 1868; of sore throat, with intense pain in the back and head, together with high fever. The hyposulphite of soda was prescribed.

March 2. The pain and fever was somewhat relieved. The hyposulphite was continued.

March 3. Noticed a slight eruption upon the face and forehead, very much resembling the eruption of measles. The bowels were constipated and pulse very quick. Ordered laxatives and milk diet.

March 4. Found the eruption more fully developed, and all the symptoms of a genuine case of discrete variola. The hyposulphite of soda was continued in 5 gr. doses, every two or three hours, and a liberal diet of milk was ordered.

March 5. Found the stage of eruption nearly completed. Bowels were somewhat constipated; urine passed freely; appetite and sleep very fair.

March 6. The stage of suppuration is now making its appearance upon the body and limbs, as well as upon the head and face. There is one thing remarkable in this case, however, that is worthy of mention, *viz.:* During the first two days of this patient's illness, there was considerable difficulty of deglutition and respiration, as has been already stated, and for the relief of which a narrow strip of flannel, well saturated with kerosene oil, was placed around his throat. At my next visit, these symptoms were very much relieved. After the stage of eruption had been nearly completed, it was noticed by myself and attendants that there was no eruption anywhere to be seen upon the throat, on which the saturated flannel had been placed. Now, whether the application of the kerosene had anything to do with preventing the appearance of the eruption upon the throat and neck, or not, is a question I am unable to decide without further experience. The theory looks rather

plausible, however, for the reason that well-formed small-pox pustules are now to be seen scattered over the whole body, except around the patient's neck.

March 8. The stage of suppuration is rapidly being completed. All the symptoms at present seem to be very favorable. The hyposulphite of soda is continued.

March 10. Patient sleeps well, and has a good appetite. Stage of suppuration is nearly completed. Urine was examined and found to contain no albumen. The same treatment continued.

March 14. Patient doing well. The stage of desiccation is now rapidly advancing, without any unfavorable symptoms; has good appetite, and sleeps well; bowels rather constipated, in consequence of partaking too freely of boiled milk. Ordered laxatives. Hyposulphite is continued.

March 25. Our little patient has, without any unfavorable or distressing sequelæ, made a rapid and perfect recovery.

Case I, as has already been stated, was contracted in Chicago, and came home to be sick in a family of five in number, *viz.:* the father, mother, and three children. The patiênt had passed through the first and second stages of the disease, and nearly through the third, before these children, who had been daily exposed, were vaccinated; and yet they escaped from the dreadful malady. From this one case in this family, in a thrifty neighborhood, no other cases originated.

Case II was exposed in Chicago, and came home to expose a loving wife and three little children, who had never been vaccinated until within two days of the father's arrival; and yet these little ones, together with the mother and attendants, entirely escaped from the disease.

Case III, whose family of four children, together with herself, nurse, and husband, had been vaccinated fourteen days previous to the invasion of the disease, was contracted by washing the clothes of Case II. During this patient's illness, the family, cooked, ate, drank, and slept in the same room with the patient; and, strange to say, not one of them took the disease except the little boy, who represents Case IV. The re-

maining three children, together with the nurse and father were vaccinated at the same time the mother and boy were, and with the same virus. With these four cases, this small epidemic of variola in Danby and vicinity terminated.

Before closing this article, I will add that it is my humble opinion that the sulphites and hyposulphites, as a basis in the treatment of small-pox and zymotic diseases generally, if properly and judiciously used, are superior to any other remedies now known in the profession.

As Prof. Polli says: The sulphites and hyposulphites not only destroy the deteriorating power of the *materies morbi* upon the cerebro-spinal and organic nervous centres; not only decrease the amount of albumen and increase the amount of urea in the urine; but directly destroy the fermento-reproductive power of the poison in the blood, so that the system, if aided by proper nutriment and sustaining treatment, will ultimately eliminate the morbid material, and, in due time, speedily establish convalescence.

ARTICLE XXIV.

PLACENTA PRÆVIA.

BY F. K. BAILEY, M.D., late of Joliet, Ill., now of Knoxville, Tenn.

During a practice extending over a period of 30 years, I have met with three cases of placenta prævia.

CASE I. June 2d, 1849 (Saturday), was called, towards night, to visit Mrs. D., living four miles from my residence; aged 20; first pregnancy; small in stature, and feeble in constitution. Found that she had slight uterine hemorrhage, and a little escape of liquor amnii, but not the least pain. She was "comfortable," pulse rather feeble, and complained of dizziness on sitting up. On examination per vaginam, found the os uteri undilated—could not reach so as to determine the presentation. There being no occasion for interference, I retired, leaving directions that I should be called, should any change occur. At

4 o'clock the next morning, made an examination, and found the condition as on the night before. There had been no pain during the night, and my patient could sit in a chair, or walk about the room. I then went home, but at 12½ o'clock was recalled, and arrived within an hour.

Found that at 11½ o'clock there was an instantaneous gush of blood from the vagina, which completely flooded the bed and ran through upon the floor. After the first flow had subsided, the hemorrhage was checked by means of cold applications made by the attendants. On my arrival, her face was pale as though she was dead; pulse feeble and quick; and the respiration very frequent and faint.

On examination, found the placenta mostly in the vagina, and one arm, with a loop of the cord, presenting at the os uteri. During all this, not the least pain had been complained of, and the os was dilated only about two inches, but smooth and rigid. Determining immediately to resort to turning, I found it very difficult to introduce the hand so as to seize the feet, by reason of a spasmodic contraction of the uterus upon its contents. After persevering effort version was at length effected, but still no expulsive pains were felt. There was no further loss of blood, for the probable reason that nearly all the vital fluid had already escaped.

Feeling confident that traction would endanger the safety of the patient, unless there should be expulsive action of the uterus, I gave ergot, with alcoholic stimuli; but in a few moments sinking commenced, which caused death in an hour.

I could not ascertain that there had been pain of any severity to cause the separation of the placenta before my arrival, and as it was almost wholly in the vagina when the examination was made, the fatal hemorrhage must have occurred in a few minutes after it commenced. What seemed peculiar, is the fact that there was no pain at any stage of the case, or, at least, but very slight.

Case II. The second case occurred March 4th, 1850, and the following is the record made of it at the time:

Mrs. W., aged 22, sanguine, nervous temperament, first

pregnancy; taken about noon on the 3d inst. with slight uterine hemorrhage, and little or no pain. Flowing continued during the night, and some pain commenced towards morning. At 8 A.M., 4th, pain increased, as also did the hemorrhage. I first saw her at 9 A.M., and found her with a flushed face; pulse full, and 120 in a minute; slight uterine effort, attended with loss of blood at every pain. On examination, found the vagina filled with coagulated blood, and the os uteri but slightly dilated, but yielding. Felt a substance within the os like the edge of the placenta. The mouth of the womb was so high in the pelvis that it was difficult to ascertain, with any degree of certainty, the true nature of the case. The pains, however, were so slight that they were not at all expulsive, and, still, sufficient to cause hemorrhage.

With a view of quieting this feeble action which only caused wasting of the vital fluid, I gave 1½ gr. opium. At 11 o'clock fainting occurred, upon which brandy and water was given, with another dose of opium, and towels wet in cold water applied to the uterine region. After about noon the pain and hemorrhage both nearly ceased; the extremities, which had become cold, began to be warm, and the patient was comparatively easy. Towards dark, expulsive pains came on, but with little or no flooding, and, on making an examination, I could distinctly feel the edge of the placenta, and, besides, the head pressing down, which pushed a "bag of waters." The membranes I at once ruptured, when the head immediately commenced descending and pressed upon the loosened edge of the afterbirth. From this time, expulsive efforts were violent and unattended with hemorrhage. About 9 o'clock, she was delivered of a stillborn child, weighing about 7 pounds.

The placenta was attached to the anterior portion of the cervix. The danger in this case seemed to be from loss of blood at each pain, however slight. When the membranes were ruptured, and the contents of the uterus brought to press upon the edge of the placenta, the bleeding vessels were closed. Had the feet or knees presented, fatal hemorrhage might have resulted before an adequate amount of pressure would have

been made. I will add that the patient recovered as rapidly as could be expected, after losing such a quantity of blood.

Case III. The third case occurred but a few days ago, the history of which is as follows:

I was called March 2d, 1868, to visit Mrs. O., aged 20, good constitution, nervous, sanguine temperament. Found her complaining of severe pain in the left iliac region, and extending to the pubis, attended with copious uterine hemorrhage. On examination, found the os uteri slightly relaxed, but high in the pelvis; the cervix not entirely obliterated, and the patient thinks she is not more than 7½ months advanced. I suspected placenta prævia, and, to relieve the unnatural pain, gave a full dose of morphine, and ordered cold water applied to the uterine region.

March 3d. Found my patient relieved from pain, and that but little flowing had occurred since yesterday. Enjoined rest, and that I should immediately be called should any unfavorable symptoms arise.

March 6th. Was called, and found her in pain, as at first, and flowing copiously. Condition of the os unchanged. Prescribed opiates, cold applications, and rest.

March 7th. Pain relieved and no more hemorrhage.

March 20th. Was called about noon, and found her suffering from pain, attended with expulsion of large coagula. Os not dilated, and could not ascertain with certainty the presentation. Gave opium, which stopped both pain and flowing in a short time. At midnight was called, and found the woman had lost a great amount of blood. Syncope had resulted. The os was dilated about one inch, and I thought I could feel an edge of the placenta upon the posterior portion of the cervix. Gave stimulants, which only caused more pain and loss of blood. Each expulsive effort made it more evident that my diagnosis was correct, as an edge of the placenta could unmistakably be felt, and a firm coagulum between it and the uterus. At this juncture I ruptured the membranes, which had begun to protrude, and a copious flow of waters followed. Upon this, the head began immediately to descend and to press upon the loos-

ened edge of the placenta. Within half an hour the hemorrhage entirely stopped, and labor was completed before daylight. The child, a male, was feeble at first, but soon breathed strongly. The woman is now doing well, although debilitated from loss of blood.

ARTICLE XXV.

REPLY TO DR. HENDRICKS' REVIEW: THE PATHOLOGY OF TYPHOID FEVER.

By Z. C. McELROY, M.D., Zanesville, Ohio.

In this reply to Dr. Hendricks' "*Review of Dr. McElroy's hypothesis of the pathology of typhoid fever,*" it is proposed to consider the objections of Dr. H. in the spirit which should animate all controversy, to wit, to give due consideration to all objections to any views advanced. As preliminary, it may be proper to state certain fundamental principles, underlying the science and practice of medicine, generally held in the representative medical mind at this time. These assented to, the way is clear for explanations; objected to, that ends the matter, so far as any views in my paper are concerned. Some common understanding on these points is absolutely necessary to an intelligent discussion.

First. What is Disease? "Disease* is not, as it was formerly imagined to be, a special entity, a particular essence, a something vague, intangible, mysterious, but simply a departure from the normal standard, a change in or of a part, brought about by the perverted action of its circulation, innervation, and nutrition; and modified by structure and function. Nearly every disease, whatever its name or site, is essentially an inflammation. Even in what are called the neuroses, or nervous affections, inflammation generally plays a conspicuous part."

* Prof. Gross' "Now and Then," published address, 1867.

Second. How is it to be studied? "As an object of natural history, in the same manner, and upon the same principle precisely as an animal, a plant, or a mineral is viewed and studied, apart from all hypothesis and speculation, as something tangible and existent, not vague and undefined, without form or substance."*

Third. What are the leading organic processes of life? Nutrition and oxidation, supply and waste, assimilation and destruction. The vegetable builds up organic matter from the inorganic elements and forces of nature. Animals oxidize it, or return its elementary constituents in lower states of organization, or their ordinary states in nature, back to the inorganic world.

Fourth. Force is always conserved as organization is ascending in complexity—the organization itself is the correlation of force—until the highest point is reached in the universe —the tissues of man.—[Grove and Tyndall.]

Fifth. Force invariably reäppears as organization is retrograding, either as heat, mechanical motion, sensation, emotion, or mentality; and the sum of all are the exact equivalent of the destructive metamorphosis accomplished.—[Grove and Tyndall.]

Typhoid fever was studied philosophically, in accordance with these fundamental principles, and before Prof. Gross' formulation of them met my eye, and its empirical phenomena, for the benefit of the medical society over whose deliberations the writer has the honor to preside, and an essay written for, and read to, them, and published in the EXAMINER for March, 1868, p. 139.

Dr. Hendricks reviews this essay in the EXAMINER for May, and objects to the pathological views therein, and thinks they are at variance with known facts; and suggests *friction*, to account for the increased temperature always present in the disease.

Applying the laws of force, and the other general principles

* Prof. Gross' "Now and Then," 1867.

laid down here, in getting a philosophic explanation of the increased temperature in typhoid fever, Dr. H. can hardly conclude otherwise than with myself, that they are due to the peroxidation of the tissues, which so steadily disappear during its progress. If the tissues were suitable for the purposes of life, they could not be oxidized without producing mechanical as well as thermal results, to wit, spasms and convulsions, and there would be absent the febrile phenomena. If nutrition and oxidation were proceeding normally, the result would be health, not disease.

Then, why the peroxidation, and increase of temperature, and waste of tissues in typhoid fever? Can it be otherwise than an interference with the final acts of nutrition, *viz.*, the passage of the liquor sanguinis, through minute cell organizations, to the solid tissues, as well as the normal condition of the blood and solids, by the cause or causes of the disease? These causes being some, not well understood, mode or modes of the ordinary forces of the universe, rendering the tissues unfit for the normal purposes of life—in other words, effete? May it not be that, if the quantity of tissue thus interfered with be small, the result is *intermittent fever?* If larger, *remittent fever?* If still larger, *continued, or typhoid fever*, running its course in two or more weeks, and ending in death or recovery? If, on the other hand, the quantity is excessively large, the result—the *cold plague*, or *pernicious fever*—the dynamics of life, as it were, stamped out—no reäction, no peroxidation set up for its removal, but death in the first rigors or stage?

If Dr. H. will think these things over again, perhaps he may change his conclusions as to Dr. McElroy's pathology of typhoid fever; for, unmistakably, the tendency of the general medical mind is toward regarding diseased action as a unity, modified by structure and function of the parts involved, and by many other causes, as age, sex, climate, season of the year, etc., etc.

ARTICLE XXVI.

SULPHITES IN THE TREATMENT OF FEVERS.

By A. C. SIMONTON, M.D,, Mitchellville, Iowa.

Editor Chicago Medical Examiner,

Dear Sir:—As additional testimony in favor of the efficacy of sulphites in the treatment of *malarial diseases*, permit me to report the following cases through the columns of your journal:

Case I, was that of myself. Having lived in one of the most excessively malarious districts on the Wabash River, in Indiana, for a number of years, and being rather susceptible to the influence of that poison, I found myself compelled to resort to the use of medicines every autumn, in order that I might enjoy anything like health. But for the last four or five years my system seemed to have become surcharged with the poison, and had taken on that condition which might properly be called a *malarious diathesis.* I was compelled, at least during all those seasons of the year when intermittents and remittents were rife, to resort to some remedy, *constantly*, as a prophylactic. I gave *arsenic* a thorough trial, and all those remedies vaunted as specifics, almost, in *chronic ague*, but to no avail; I could not rid it out of my system. I finally fell back to quinine, as the chief of its class, and continued taking it as a prophylactic, from one to three times a day, for at least half of the year. I went to Chicago, October 1st, 1867, to attend Chicago Medical College, and took with me nearly an ounce of quinine, of which I consumed the greater portion up to January, when, after hearing your lectures on the use of the sulphites in malarial diseases, I resolved to give them a thorough testing in my case. I therefore left off the quinine January 13th, 1868, and commenced taking the sulphite of soda in 10 gr. doses, four times a day, in solution.

I am happy to say that, in the space of one week, my appetite commenced improving, digestion was performed with more vigor, and that almost constant tendency to yawn and stretch,

which are characteristic of this disease, had disappeared. In the space of about two weeks, I could feel no effects of the poison in my system; but, in order to make assurance "doubly sure," I continued the remedy for another fortnight, when I discontinued it, feeling almost like another person.

I took another short "course" of the sulphite in five or six weeks from the above-mentioned time, and have enjoyed perfect immunity from any of the symptoms of malarial poisoning up to this date, June 9th. Since I came to this locality, I have treated several cases of *chronic ague* with the sulphite of soda, successfully.

CASE II. D. D., farmer, who has been incapacitated for business for the past six months, owing to the frequent recurrence of intermittent fever, which, he says, has been broken up time after time, by the usual remedies, applied for treatment. Notwithstanding his assertion that he had taken an abundance of quinine, I ordered a sufficient quantity of that remedy to break the paroxysms, and then followed at once with the sulphite, in 10 gr. doses, four times a day. Had this continued for the space of three weeks, when the patient reported himself cured, and has since gone about his work with the vigor of a healthy man.

CASES III and IV of my note-book, are parallel with the one just reported; and there are others of different degrees of severity; but I will not occupy space in detailing them here.

Suffice it to say that, so far as my experience has gone, the sulphites are the remedies, *par excellence*, to rid the system of that poison, the nature and *modus operandi* of which is not yet fully established, which causes intermittent and remittent fevers. In all acute attacks I should deem it advisable, first, to check the paroxysms by the usual antiperiodics, after which, the remedy under consideration will complete the work.

I shall give this remedy a more thorough testing during the autumn months, and will probably report on some future occasion.

Proceedings of Societies.

CHICAGO MEDICAL SOCIETY.

Friday, May 22, 1868.

The regular meeting of the Chicago Medical Society was called to order by Dr. Wickersham, who was chosen President, *pro tem.* The Secretary read the minutes of the last meeting, which were approved.

Under the call for pathological specimens, Dr. Holmes presented two cataracts, one being of unusual large size; also a modified and improved cataract knife.

Dr. Durham reported the case of a lady whom he had been attending for some time, who had chronic diarrhœa. The patient never had much cough. A *post mortem* revealed extensive miliary tubercle in both lungs, and, also, ulceration of the intestine; specimens of each being exhibited to the Society.

Dr. Davis remarked that there had probably been a pleuro-pneumonic inflammation previous to death. Did not think there was a deposit of tubercle in the menentery. Said he had seen a goodly number of cases of chronic diarrhœa with pulmonary tuberculosis, in which there was no noticeable cough if the diarrhœa were not controlled; but if the diarrhœa was checked for two or three weeks, a cough would supervene, with muco-purulent expectoration. A *post mortem* revealing, in either case, pulmonary tuberculosis. Recommended that Dr. Durham examine the specimens under the microscope, and report the same to the Society.

Under reports of cases, Dr. Wanzer reported the case of a man who fell and split his nose and lip, the wound filling with splinters and sand, which, however, healed by granulations; but his nose was decidedly one-sided, which, nevertheless, he righted by an operation. He also reported the case of a little boy, 5 years old, who had his leg crushed by a wagon wheel. Stated that the bone was denuded for some three inches below

the patella, and the inflammation was very great, and asked the Society for advice in the matter.

Dr. Davis did not think any advice could be given, without seeing the patient.

Dr. Wickersham said that he had been informed that the cattle in Sangamon Co. were dying off at the rate of 75 per day from a disease, as yet unknown, and he thought it the duty of the Society, to discover, if possible, what this disease was, and the treatment.

Dr. Davis regarded the report as well worthy the attention of the Society, and recommended that a committee be appointed to investigate the matter, should the disease continue to extend.

On motion of the President, the following committee was appointed: Drs. Wickersham, Davis, Paoli, Bogue, and Durham, whose duty it should be to report from time to time, if deemed necessary.

Dr. Davis recommended that the Society only meet once a month during the months June, July, and August, and that on the first Friday in each month. Motion carried.

Society adjourned.

Friday, May 29, 1868.

The regular meeting of the Chicago Medical Society was called to order by the President, Dr. Marguerat. The Secretary read the proceedings of the last meeting, which were duly approved and ordered to be placed on file.

Dr. A. H. Gray, who was recommended for membership at the last meeting, and favorably reported on by the Board of Censors, was balloted for, and duly elected a member of the Society.

The Society then proceeded to the discussion of the regular subject, chosen at a previous meeting, *viz.:* "Treatment in cases of disproportion of the size of the fœtal head to the pelvis."

The discussion was commenced by Dr. John Reed, and participated in by Drs. Paoli, Davis, Bevan, Wickersham, Holmes,

and Loverin. No new facts or modes of practice were developed, and hence we omit the usual synopsis.

The subject chosen for discussion on the first Friday in July was, "What effect would ice cut from the basin on the lake shore have upon the health of the people using it for drinking purposes?"

Dr. Bevan asked between what hours constituted a night visit? It was decided from 10 P.M. to 6 A.M., when the the physician was allowed double fees.

The Society then adjourned.

Friday, June 5, 1868.

The regular meeting of the Chicago Medical Society was called to order by the President, Dr. Marguerat, and the proceedings of the previous meeting were read by the Secretary and approved.

Under the call for committee reports, Dr. Durham, in behalf of the committee appointed to investigate the cattle disease, said that he had been furnished with some information on the subject, and exhibited to the Society a letter from Dr. Geo. B. Allen, of Springfield, in which he regarded this disease as a pleuro-pneumonia. He also read an article which was published in the *Springfield Journal*, by the same author. Stated that he has been informed by Dr. Janes that the disease has entirely abated.

Under call for pathological specimens, Dr. Bogue presented a portion of the vertebræ of a man who had died in the County Hospital, from fracture of the twelfth dorsal vertebra, caused by being run over and doubled up by a hand-car. He was admitted to the Hospital at the time of the accident, April 14, with complete loss of sensation and motion of the lower extremities, but no pain. May 4, bed-sores and marked deformity at the point of injury. May 9, bed-sores sloughing; a thin, fetid discharge from bowels constantly. On May 31, the patient died from exhaustion. Stated that below the seat of injury the temperature was about two degrees higher than above. *Post mortem* revealed a complete fracture of vertebra

with the last ribs twisted from their attachment, and the cord softened about the fracture. In this case, there was no counter-extension employed, and only the palliative remedies administered.

The practicability of opening to the cord, by means of a trephine, was discussed by Drs. Lyman, Holmes, Paoli, Bogue, Durham, and Wickersham; the latter gentleman believing that cases of fracture of the vertebræ should not be experimented on by this uncertain means, thereby avoiding suits for malpractice.

Dr. Bogue believes that where there is no mobility nor crepitus, it is useless to operate by trephining.

Dr. Lyman thinks if 10 per cent of these cases can be saved, it will justify the operation.

Under the head of cases, Dr. Wickersham reported the case of a man who had a soft chancre, nine or ten months ago, who was successfully treated. A short time since, he had an eruption, resembling secondary disease, come out on the forehead. This eruption occurred some 36 or 48 hours after the patient had commenced wearing red flannel shirts, and upon discontinuing wearing them the eruption disappeared in 48 hours. He believes physicians, generally, to be too hasty in their diagnosis, frequently telling patients they have constitutional disease, when there is no foundation for the statement. He also related a case, where a lady was troubled with a similar eruption from eating strawberries, the eruption always occurring in strawberry season.

Dr. Loverin says he has cases of this rash, from the wearing of red flannel, extending over the body.

Dr. Durham related the case of a man, who fell on the ice while crossing the river at Atchison, Kansas, early last winter. He did not fall entirely down, but merely slipped, saving himself by allowing his weight to come on one hand. The first symptoms were faintness and a feeling of nausea, he not being able to move for upwards of half an hour, during which he remained lying on the ice. Finally, he arose, feeling pretty well, and resumed his journey to Valparaiso, Ind., where he

resided. States that in four months his weight was reduced from 198 to 140 pounds, but he now weighs about 160 pounds. On examination, he found pulse 83, shortness of breath, and retention of urine. Over the third, fourth, and fifth dorsal vertebræ great tenderness on pressure, but, to all appearances, no displacement or abnormal appearance of the spine, there being only this excessive hyperæsthesia on the right side. Amount of urine very great.

Dr. Lyman thought this case of much interest, and hoped Dr. Durham would have it published, as it is undoubtedly an injury of the spine from a comparatively slight cause.

Dr. Paoli asked as to the possibility of this case being one of malingering; citing one in his own practice.

The discussion was also participated in by Drs. Bogue and Loverin.

Dr. Holmes related a case, where the use of chloroform was followed by dangerous symptoms, the pulse falling from 120 to 46 beats per minute, and then ceasing entirely. Circulation was established by placing the patient's head down, at an angle of 45°. He also stated that a similar case, last winter, speedily recovered under the same treatment.

The Society then adjourned until the first Friday in July.

MORGAN COUNTY MEDICAL SOCIETY.

The regular monthly meeting of the Morgan County Medical Society was held in Music Hall, on Monday, April 8th, 1868, and was called to order by the President, Dr. Henry Jones, at 2 o'clock P.M.

In the absence of the Secretary, Dr. Lucas was elected Secretary *pro tem.*

The minutes of the last meeting were read and approved.

Drs. C. G. Jones and G. H. Sanford, both of Jacksonville, were nominated as members.

Dr. Prince exhibited some specimens of calculi from the bladder.

1. A specimen of four calculi, taken from a young man, 21 years old, by the lateral operation in 1857. They had been 15 years forming. The patient is still living.

2. A specimen of a single calculus of lithic acid, weighing 4¼ ounces, removed in 1859, by the lateral section. The patient is still living, though with an urinary fistula, which requires a plastic operation to close it.

3. A small phosphatic calculus, removed by the lateral section, from a boy 12 years old. The patient recovered, and is still living.

4. A nest of 14 calculi, of nearly the same shape and size, weighing, in the aggregate, 4 ounces (avoirdupois), taken from an old gentleman aged 63 years, in 1864. The patient recovered from the operation, and survived a year.

5. Three phosphatic calculi, weighing, in the aggregate, 5¼ ounces, removed from a patient 31 years of age, on the 5th of March last, by the median operation. The patient is in the process of recovery.

6. A phosphatic calculus, together with a small penknife, from a female bladder, removed by a section through the vaginal wall, which was subsequently closed by the operation usually performed for vesico-vaginal fistula. Recovery complete.

Comments were made upon the relations of these operations to general surgery, and upon questions which they helped to illustrate. One point made was, that after severe injuries and operations, a more supporting treatment is necessary, than accords with the extreme fear of inflammation, which prevailed in the first part of the present century.

Dr. Edgar thinks that if by diagnosis the calculus proves to be of large size, the operation of lateral incision is safer than that by dilatation and tearing, as the rectum is less likely to suffer. He made also some remarks about the formation of calculi in the bladder. He thinks that accidental detachment of mucus and foreign bodies is oftener the cause of their formation than certain qualities of food and water.

Dr. Bibb reported two cases of formation of calculus deposit, operations by Prof. Brainard, caused by the introduction of a button and part of a pencil, in the female bladder.

A letter from Dr. McVey was read, excusing himself for non-appearance. He promised to furnish the Society an essay some other time.

Dr. Lucas read an essay on the nature of lochia, and its abnormities in regard to color, quantity, quality, and odor, and reported a case of suppressed lochia of three days' standing, caused by a forcible contraction of the uterus, in connection with profuse sweating, and free suction of a strong child.

Dr. Prince made some remarks on the above subject. He compared the wound and its changes, produced by the detachment of the placenta from the uterus, with those of a surgical wound, and advised the study of surgery to every obstetrician.

Dr. Fisher asked the Society if bandaging after delivery was old fogyism, as considered by some physicians. He is of the opinion that the bandage is necessary for the expulsion of coagulated blood.

Dr. Edgar thinks it necessary in delicate persons, but not so important in stout ones. In connection he spoke about the diet and after-treatment of lying-in women, which ought to be nourishing and supporting. He also approves the knowledge of surgery to the obstetrician.

Dr. Reed remarked, the bandage is necessary to prevent the parts to remain loose and flabby, and to insure a good form, but gave a case where the woman was up the next day, without a bandage, doing her work. He referred also to the savages and half-civilized nations, women make little or no change in their general conduct in consequence of childbirth, but return to their usual occupation almost immediately after delivery.

Dr. Henry Jones stated, that in ascites, after throwing off the water, a bandage is applied to prevent a feeling of fainting and prostration; the same ought to be applied to the uterus after the expulsion of its contents, and sometimes on the above grounds before the expulsion of the afterbirth in tedious labors. He thinks that milk fever is a very rare occurrence and often only an imaginary disease.

Dr. Edgar is of the opinion that the febrile excitement, often called milk fever, is due to the reaction of the exhausting pain,

depletion, and nervous depression. In regard to the application of the bandage, he thinks that the pressure is often not applied to its proper place, producing like tight-lacing, prolapse, tumors, displacement, and its consequences. Nine-tenths of the female troubles are, considered by him, due to faulty dress, and something ought to be done to prevent it.

Dr. Henry Jones thinks that all these remarks are of no use, for it is impracticable for a physician to correct tight-lacing.

Dr. Fisher is of the opinion that there is not so much imprudence in dress now as there used to be, and that the fashion controls what the physician cannot prevent.

Dr. Mitchell, of Meredosia, though not a member made some remarks on the propriety of the application of the bandage and the injury of imprudence of dress, corroborating the above opinions.

Drs. Edgar, Sr., Fisher, and Bibb were appointed a committee to make arrangements for the celebration of the Second Anniversary, to be held May 14th. On motion, the Society adjourned, to meet on the second Thursday of May, 1868, at 11 o'clock A.M., in the Fireman's Hall.

C. J. LUCAS, M.D., *Sec'y pro tem.*

MORGAN COUNTY MEDICAL SOCIETY.

The Society met in Firemen's Hall, Jacksonville, on Thursday, May 14th, at half-past eleven o'clock A.M. Upon being called to order by the President, Dr. Henry Jones, the proceedings of the last regular meeting were read and approved.

The committee on examinations having reported favorably upon the nominations of Dr. C. G. Jones, Dr. G. H. Sandford, and Dr. Welch, they were unanimously elected members of the Society.

This being the annual meeting the Secretary's report for the year was then read, and a resolution of thanks to Dr. Wilbur was passed.

The Treasurer, Dr. Craig, having been away from home, was unable to present his annual report, but promised to hand it in

at the next meeting. A resolution of thanks to Dr. Craig for the faithful performance of official duties was then unanimously passed by the Society.

Nominations for delegates to the State Medical Convention to be held in Quincy, Illinois, on the 19th of May, were then made, and Drs. Fisher, Lucas, Edgar, Wilbur, De Leuw, and Johnson were elected.

Drs. Prince, H. Jones, W. S. Edgar, Bibb, and Fisher were then elected as the examining Committee of the Society for the ensuing year.

The Society then proceeded to elect its officers for the ensuing year with the following result:

For President—Dr. David Prince.

For Vice-President—Dr. J. G. Cox.

For Secretary—Dr. C. T. Wilbur.

For Treasurer—Dr. G. R. Bibb.

Dr. Prince was then conducted to the chair, when he made a few introductory remarks, followed by Dr. Henry Jones with a valedictory.

On motion Dr. Jones was tendered a vote of thanks by the Society, by a rising vote.

The following motion was then passed:

"That the corporate members of the Society present be assessed the sum of one dollar and fifty cents for the expense incurred in the Society dinner, and if the amount raised by said assessment exceed the expense thus incurred, the ballance shall remain in the hands of the Treasurer, subject to the order of the Finance Committee."

Dr. W. S. Edgar then read a draft of the proposed law for the "better regulation of the practice of medicine in the State of Illinois," and requested the opinion of the Society upon its practicability and main points.

Dr. Prince said, "The plan proposed seemed to him to be the only feasible plan. The prevalent feeling in the community seemed to be 'free medicine and no sects in medicine.' Public sentiment seemed to demand this—still the people need protection. Legislation is required to protect the public against ig-

norant pretenders. I should be glad if this plan should go to the State Medical Convention with the endorsement of the Morgan County Medical Society."

Dr. Samuel Adams then said, "I believe the popular sentiment is 'free medicine.' I think there is wisdom in Dr. Prince's suggestions, and the law should be shaped to avoid a collision with the sentiment of free exercise of each ones talent.

"I doubt the expediency of fine for prescription of remedies, for I think the forfeiture of remuneration would be a sufficient specification of penalty.

"Law cannot do much towards improving the practice of medicine. It must be done by the association, and proper united effort of educated men. I am not very hopeful of advantages to be derived from legislation.

"I would suggest that the evil lies partly where this proposition seems to place it, in the medical schools. They put through as many students as they can, and often when they are not properly qualified, in order to obtain large classes, and consequently considerable fees.

"This evil can only be remedied by properly endowed professorships—that will entirely remove the profession from the temptation of largess by reason of a large number of fees—or "no graduate, no fee." This law will have some influence upon these institutions by stimulating them to insist upon well qualified graduates. I am inclined to give this law my approval without being very hopeful of the success of such legislation.

Dr. Reed remarked, "I have not much hope as to the result of legislation. More depends upon the united action of men of education in the profession."

Dr. Fisher remarked, "I should hope a good deal from the passage of this law. It will serve to protect the community. When I was a student I happened to be in Paris in this State, when I had a conversation with a practicing physician, who advised me to go at once into the practice of the profession, and not spend further time or money in trying to get a diploma, for, he said, there was no particular advantage in the commu-

nity for possession of the certificates of a regular medical education, and he consequently considered it time and money thrown away. I trust the passage of this law will ameliorate this condition of things.

Dr. Henry Jones remarked, "I have no doubt as to the expediency of making the effort. If we go before the community as trying to help them, they will surely consider us as acting selfishly. I am doubtful of results, but I should not hesitate to attempt to pass this law. I believe with Dr. Adams, that the elevation of our profession is the most probable means of doing good in this direction."

Dr. Craig remarked, "I have some hope that the bill may go through from its evident design. It protects the people from the demands of quacks. The Legislature will not dare to refuse to protect the people by placing safeguards around their pockets."

Dr. Henry Jones suggested "that this law unfortunately would not reach the most dangerous class of practitioners. Educated men who, with some ridiculous crotchet, would always practice upon the ignorance and credulity of the people of the community."

The motion was made and passed, that the plan of a law, as presented by Dr. W. S. Edgar, has the approval and hearty endorsement of the Morgan County Medical Society.

At 1.40 o'clock, the Society adjourned to meet at Dunlap House, for dinner, at 2 o'clock P.M.

C. T. WILBUR, M.D., *Sec'y.*

ILLINOIS STATE MEDICAL SOCIETY.

RECORD OF PROCEEDINGS DURING THE ANNUAL MEETING IN QUINCY, MAY 19TH AND 20TH, 1868.

The members of the Society assembled in Lincoln Hall, in the city of Quincy, and were called to order by the President, Dr. S. W. Noble, at 10½ A.M.

Prayer was made by Rev. Mr. Hunting; and Dr. Bane, in

behalf of the Committee of Arrangements, extended to the delegates and members a cordial welcome to the hospitalities of the city of Quincy.

Dr. Jos. Robbins, Secretary of the Committee of Arrangements, reported the names of such delegates and members as had registered. The following is the list of delegates and members in attendance:

Delegates.

Adams County Medical Society.—Drs. J. W. Bartlett, M. M. Bane, Francis Drude, Julius Gunther, H. W. Kendall, L. H. Baker, N. B. Martin, R. Williams, of Quincy.

Chicago Medical Society.—Drs. T. D. Fitch, J. M. Hutchinson, of Chicago.

Chicago Medical College.—Drs. N. S. Davis, E. Andrews, of Chicago.

Fox River Valley Medical Association.—Dr. D. W. Young, of Aurora.

Hancock County Medical Society.—Drs. Geo. W. Hall, of Carthage; A. E. McNeall, Brewsburg.

Iroquois Co. Medical Society.—Dr. L. T. Hewins, of Loda.

Macon Co. Medical Society.—Drs. S. T. Trowbridge, J. A. W. Hostetler, E. W. Moore, of Decatur.

Medical Board of Cook Co. Hospital.—Dr. R. G. Bogue, of Chicago.

McLean Co. Medical Society.—Drs. H. Noble, of Heyworth; D. L. Crist, of Bloomington.

Military Tract Medical Association.—Drs. S. P. Breed, of Princeton; John M. Morse, H. S. Hurd, of Galesburg; S. R. Crawford, of Monmouth; Benj. Woodward, of Galesburg.

Morgan Co. Medical Society.—Drs. C. T. Wilbur, C. J. Lucas, W. S. Edgar, of Jacksonville.

Quincy Medical Society.—Drs. P. T. Kinsler, E. D. Helms, S. A. Amorey, P. A. Marks, of Quincy; J. F. McCormick, of Fowler.

Rush Medical College.—Dr. Edwin Powell, of Chicago.

Winnebago Co. Medical Society.—Dr. A. L. McArthur, of Rockford.

Permanent Members.

Dr. J. O. Hamilton, Jerseyville, Jersey Co.

Drs. G. R. Bibb, David Prince, Jacksonville, Morgan Co.

Drs. J. N. Ralston, Louis Watson, P. H. Bailhache, A. Niles, of Quincy, W. M. Landon, of Burton, M. Shepherd, of Payson, Adams Co.

Drs. H. B. Buck, H. C. Barrell, H. H. Roman, Justus Townsend, of Springfield, N. Wright, of Chatham, Sangamon Co.

Dr. S. W. Noble, of Bloomington, McLean Co.

Dr. J. T. Fraser, of Howard's Point, Thos. G. Hickman, R. T. Higgins, of Vandalia, Fayette Co.

Dr. E. P. Cook, of Mendota, LaSalle Co.

Dr. F. O. Earle, Chicago, Cook Co.

The following were also elected permanent members by unanimous vote:

J. W. Bonney, of Columbus, proposed by Jos. Robbins.
John E. Combs, of Bloomington, " S. W. Noble.
Ed. Holderness, of Weston, " "
F. A. Warner, of Farmington, " S. K. Crawford.
Henry M. Hurd, of Galesburg, " "
R. J. Patterson, of Batavia, " D. W. Young.
Samuel Milehan, of Camp Point, " D. Prince.

On motion of Dr. M. M. Bane, J. A. Hay, M.D., of La Grange, Mo., and B. J. Bettelheim, M.D., of Brookfield, Mo., were elected members by invitation.

On motion of Dr. L. T. Hewins, of Loda, Dr. T. D. Fitch, of Chicago, was chosen Treasurer *pro tem.*

The Society took a recess of ten minutes, to give the members from each county reoresented an opportunity to select one of their number to constitute a committee for the nomination of officers and the selection of standing committees. When the Society was called to order, the Secretary announced the following as the Nominating Committee:

Adams Co., Dr. W. M. Lander.
Bureau Co., Dr. S. P. Breed.
Cook Co., Dr. R. G. Bogue.
Fayette Co., Dr. R. T. Higgins.

Hancock Co., Dr. G. W. Hall.
Iroquois Co., Dr. L. T. Hewins.
Jersey Co., Dr. J. O. Hamilton.
Kane Co., Dr. D. W. Young.
Macon Co., Dr. J. A. W. Hostetler.
McLean Co., Dr. H. Noble.
Morgan Co., Dr. G. R. Bibb.
Sangamon Co., Dr. H. H. Roman.
Winnebago Co., Dr. A. L. McArthur.
Knox Co., Dr. H. S. Hurd.
Warren Co., Dr. S. K. Crawford.

The committee to which was referred the charges against the Quincy Medical Society, at the last annual meeting, through the Secretary, submitted the following report:

To the Illinois State Medical Society:

Your committee, "appointed to examine and report on the status of the Quincy Medical Society," would, most respectfully, beg leave to report that we have given considerable time and careful consideration to the examination of the statements presented to us by Dr. J. Robbins, on the part of the Adams Co. Medical Society, and of Dr. A. Niles, in behalf of the Quincy Medical Society; and that we can find no just cause for the exclusion of the delegates of the Quincy Medical Society; and would, therefore, recommend the adoption of the following resolution:

Resolved, That the Quincy Medical Society is entitled to representation in the Illinois State Medical Society.

C. Goodbrake,
D. O. Crist.

Dr. H. Noble moved that the report of the committee be accepted, and the accompanying resolution adopted; and expressed the hope that the question would be taken without debate.

Dr. Louis Watson objected, and claimed that the whole subject should be discussed.

Dr. J. Robbins was proceeding to discuss the merits of the questions between the Adams Co. Medical Society and the Quincy Medical Society, when Dr. N. S. Davis protested against

his proceeding, stating that part of the time of the previous annual meeting had been absorbed on the same topic; it had then been referred to as impartial a committee as could be found in the State; both parties had had a whole year to present the facts before that committee, and he thought the conclusions should be adopted without further waste of time by the Society.

Dr. N. Wright called for the *previous question* on the motion of Dr. H. Noble. The call was sustained by the following vote: Ayes 20, Nays 15.

The resolution reported by the committee was then adopted, by Ayes 19, Nays 12.

The Secretary read a communication from Dr. E. L. Holmes, of Chicago, saying that he has his report partly prepared, but was detained at home by sickness in his family, and requesting that he might have the privilege of giving his report directly "to the Publishing Committee, for publication in the Transactions."

On motion of Dr. T. D. Fitch, the request of Dr. Holmes was granted.

The Permanent Secretary, in behalf of the Publishing Committee, presented the following report, which was adopted by a vote of the Society:

Report of the Committee of Publication to the Illinois State Medical Society, for 1868.

As soon after the last meeting of the Society as the papers and reports referred to the committee were received by the Secretary, they were put to press, and 200 copies ordered for the use of the Society. As soon as they were ready, a copy was mailed, postage paid, to every member of the Society who was reported by the Treasurer as having paid his annual assessment for 1867. About 110 copies were thus distributed; about 25 copies were sent to the various medical periodicals, and a smaller number of copies were sent to other medical societies who desired to exchange Transactions with us. Between 40 and 50 copies remain in the hands of the Secretary, for the further use of the Society.

The cost of publishing the Transactions for the year 1867, was $298.61, as shown by the bill of Robert Fergus' Sons, Printers, filed with the vouchers of the Treasurer. The same has been paid in full, together with all other bills against the Society for printing or otherwise. See report of the Treasurer.

All of which is respectfully submitted, in behalf of the Publishing Committee, by

N. S. DAVIS, *Permanent Sec'y.*

The annual report of the Treasurer was presented by the Secretary, as follows:

Treasurer's Report.

The Treasurer of the Illinois State Medical Society would respectfully submit his *Sixth* Annual Report. In accordance with the instruction of the Society, he has forwarded a statement of dues to all the members who were not present at the last meeting, and has received, in answer to this correspondence, the sum of $81. The financial statement for the year, ending May, 1868, is as follows:

J. H. HOLLISTER, *Treasurer*,

In acc't with ILL. STATE MED. SOCIETY,

1867.	*Dr.*		
May	To Cash received at the annual meeting at		
1868.	Springfield, as per Treasurer's Record,--		$287 00
Feb. 17.	Am't received by remittance, in answer to correspondence with absent members,----		81 00
	Am't in full,----------		$368 00
	Cr.		
By paid for publishing Transactions and Circulars in full, for 1867,----------		$304 61	
Expenses of correspondence,----------		3 00	
Paid for mailing Transactions,----------		7 00	314 61
Balance in Treasury, subject to order,----------			$43 39

Respectfully submitted,

J. H. HOLLISTER, *Treasurer.*

The report was accepted, and ordered to be printed in the Transactions.

A communication was received from Dr. J. H. Hollister, Chairman of the Committee on Necrology, asking for further time to complete a report, which request was granted by vote of the Society.

The Nominating Committee presented the following report:

For President—Dr. S. T. Trowbridge, of Decatur.

1st Vice-President—Dr. J. O. Hamilton, of Jerseyville.

2d Vice-President—Dr. J. T. Frazer, of Howard's Point.

Treasurer—Dr. J. H. Hollister, of Chicago.

Assistant-Secretary—Dr. T. D. Fitch, of Chicago.

Place for holding next Annual Meeting—Chicago.

On motion, the recommendations of the Committee were unanimously adopted.

Drs. L. T. Hewins and E. W. Moore were appointed a committee to conduct the newly elected officers to their places.

Dr. Trowbridge, on taking the chair, expressed his gratitude to the Society for the honor conferred; and Dr. Noble, in retiring, cordially thanked the Society for the uniform kindness and courtesy shown him during the past year.

The Society then adjourned until 1½ o'clock P.M.

Afternoon Session.

Society called to order by the President, at 2 o'clock P.M.

Reports from standing committees being in order, were called for as follows:

On Practical Medicine and Epidemics, Dr. H. A. Johnson, of Chicago, Chairman. Dr. E. Andrews said he was requested by the chairman of the committee to state that he had been absent in Europe, which, with some degree of ill-health, had prevented his preparing a suitable report.

Dr. E. P. Cook, of Mendota, one of the members of the committee, presented and read a report in relation to the Topography and Diseases of LaSalle County. On motion of Dr. S. W. Noble, the report was accepted and referred to the Committee of Publication.

On Surgery, Dr. Edwin Powell, of Chicago, Chairman. Dr. Powell presented an abstract of his report, which related, first, to the treatment of ununited fractures by repeated drillings, as recommended by the late Prof. Brainard; second, to treatment of strictures of the urethra by perineal section; third, cystotomy as a remedy for cystitis; fourth, to the treatment of prolapsus of the rectum; fifth, to the use of carbolic acid in surgery; sixth, to the use of bromine in erysipelas; and seventh, to the resection of nerves for neuralgia.

Dr. E. Andrews moved that the report be accepted and referred to the Committee on Publication. He also commented at some length on that part of the report relating to the resection of nerves, and adduced some cases in his practice, in which operations on the nerve of the lower jaw had proved permanently successful. He advises the operation to be made high enough to embrace the myeloid branch of the nerve.

Dr. W. S. Edgar, in relation to that part of the report on the treatment of ununited fractures, remarked that he regarded the repeated borings with the drill, recommended by Dr. Powell, unnecessary if the *spike* was used properly as an aid. He related one case treated by the *spike* alone, without drilling, and another in which the spike and drill were both used.

Dr. Powell thought the difference between the action of the spike and drill was just the difference between the simple and compound fracture. He claimed that the simple drill was used sub-cutaneously and produced no dangerous degree of inflammation.

Dr. D. Prince remarked, that in the cases in which he had used the *spike* none of the symptoms of compound fracture followed; the spike operating by pressing the fractured parts together more perfectly.

The vote was taken on the motion to refer the report of Dr. Powell, and carried unanimously.

On Obstetrics, Dr. E. W. Moore, of Decatur, Chairman. Dr. Moore presented and read an interesting report, which was accepted and referred to the Committee of Publication.

On Drugs and Medicines, Dr. Henry Wing, of Collinsville, Chairman. No report, and the committee discharged.

Special Committees.

Dr. H. H. Roman, of Springfield, read a report on Ophthalmology, which was accepted and referred to the Committee of Publication.

Dr. N. S. Davis, of Chicago, announced that his report on Cholera was ready, and its hearing was made the special order for 10 o'clock A.M., to-morrow.

Special Committee on the Language of the Pulse in Disease, Dr. J. H. Hollister, of Chicago, Chairman, made no report.

Dr. D. Prince, Special Committee on Fractures of the Lower end of the *Radius*, had not completed his report, and was continued another year.

Dr. E. Ingalls, of Chicago, on Conservatism in the Use of Remedies, made no report.

Dr. R. G. Bogue, of Chicago, Chairman of the Committee on Diseases of the Spine and Joints, read a report on the latter topic, which was discussed by Drs. D. W. Young, E. Andrews, N. S. Davis, and E. Powell. The report was referred to the the Committee of Publication.

On motion, the Society adjourned until 8 o'clock P.M.

Evening Session.

The President called the Society to order at 8 o'clock P.M.

Dr. O. F. Earle, of Chicago, member of the Committee on Deformities and Diseases of the Spine and Joints, read a report in relation to the pathology and treatment of deformities of the spine. The report was accepted and referred to the Committee of Publication.

Dr. E. Andrews, of Chicago, read a paper on the Use of the Endoscope, accompanied by an exhibition of the instrument used with a magnesium light. The paper was referred to the Committee of Publication.

The Committee on Nominations reported the following standing and special committees, to report at the next annual meeting of the Society.

On Surgery—Drs. A. L. McArthur, of Rockford; D. W. Young, of Aurora; and R. T. Higgins, of Vandalia.

On Practical Medicine and Epidemics—Drs. E. P. Cook, of Mendota; D. L. Jewell, of Watseka; and S. P. Breed, of Princeton.

On Obstetrics—Drs. H. B. Buck, of Springfield; S. K. Crawford, of Monmouth; and H. B. Cheney, of Joliet.

On Drugs and Medicines—Drs. N. S. Davis, of Chicago; Louis Watson, of Quincy; and F. B. Haller, of Vandalia.

On Gynæcology—Dr. J. H. Chenowith, of Decatur.

On Insanity, to inquire what legislation, if any, is necessary to secure the rights and secure the comforts of the insane, who do not have the benefits of the Illinois Hospital for the Insane —Drs. R. J. Patterson, of Batavia; D. W. Young, of Aurora; and G. R. Bibb, of Jacksonville.

On Lithotomy—Dr. E. Powell, of Chicago.

On Deformities of the Knee and Ankle-Joints, unconnected with Inflammation—Dr. R. G. Bogue, of Chicago.

On Ophthalmology—Drs. E. L. Holmes, of Chicago; H. H. Roman, of Springfield; and J. S. Hildreth, of Chicago.

On Aphasia—Dr. H. M. Hurd, of Galesburg.

On Cholera-Infantum—Drs. N. Wright, of Chatham, and H. C. Barrell, of Springfield.

On Idiocy—Drs. C. T. Wilbur, of Jacksonville; N. S. Davis, of Chicago; H. H. Roman, of Springfield; F. B. Haller, of Vandalia; and S. T. Trowbridge, of Decatur.

On Staphyloraphy—Dr. Moses Gunn, of Chicago.

On motion, the report of the Nominating Committee was adopted.

The Society adjourned until 9 o'clock A.M.

SECOND DAY—*Morning Session.*

The Society was called to order at 9 o'clock A.M., Dr. Trowbridge in the chair.

Dr. DeLaskie Miller, of Chicago, special committee on Cholera-Infantum, made no report.

Dr. F. B. Haller, of Vandalia, chairman of the committee to which was referred certain resolutions pertaining to Medical

Education, at the annual meeting of 1867, submitted the following report:

GENTLEMEN OF THE ILLINOIS STATE MEDICAL SOCIETY:

Your committee, to whom was referred the resolution of last year, on Medical Education and Schools, would respectfully report the following preamble and resolutions, *viz.:*

Whereas, There is, manifestly, a general desire upon the part of all the medical men of America, to raise the grade of medical education to a higher and more efficient degree; therefore, be it

Resolved, That we, the representatives of true medicine of Illinois, in annual meeting assembled, do adopt the resolution on medical schools and education, offered at our last annual meeting.

Resolved, That we will receive no young man into our offices to read medicine, unless he is possessed of such qualification as was recommended by the Teachers' Convention of 1867.

Resolved, That we should, as exponents of the sentiments of the profession of Illinois, and having the glory of our profession and the welfare of humanity at heart, encourage and patronize such schools only as give the most thorough and systematic course of teaching, *regardless of men or place.*

Resolved, That the schools of our own State be requested to so modify and extend their time of teaching as to make them as thorough as the times demand, and equal to any schools in the world. F. B. HALLER, *Chairman.*

Dr. L. Watson moved that the resolutions offered by the committee be adopted.

After some discussion, Dr. H. Noble moved that the resolution offered by Dr. F. B. Haller, at the last annual meeting, be adopted as a substitute for those now reported by the committee.

Dr. D. W. Young moved to amend, by striking out the last clause of the resolution offered last year. The motion was seconded by Dr. Davis, and adopted. Remarks on the subject were made by Drs. Powell, Young, Robbins, Watson, Noble, and Davis, after which the resolution, as amended, was adopted by a *unanimous vote.* The resolution is as follows:

"*Resolved*, That we, the members of the State Medical Society, recommend that the several medical schools in this State adopt the plan of teaching recommended by the recent Teachers' Convention, in Cincinnati, as soon as practicable."

Dr. Jas. Robbins, of Quincy, offered a series of preambles and resolutions, ridiculing the Society for its action in admitting the Quincy Medical Society to representation, which were laid on the table, by a vote of ayes 20, noes 10.

Dr. H. Noble called up and moved the adoption of the following amendment of the Constitution, proposed at the annual meeting of 1867, by Dr. E. W. Moore:

"That Art. 4 of the Constitution be so amended, that the term of office of the President and Vice-Presidents shall commence at the opening of the next annual meeting after their election."

Remarks were made by Drs. W. S. Edgar, S. W. Noble, and T. D. Fitch, in opposition to the proposed change; and by Drs. E. W. Moore, D. W. Young, D. Prince, and A. L. McArthur in its favor. The question being taken, the amendment was adopted by the constitutional majority.

Dr. N. S. Davis, of Chicago, special committee on the Causes, Pathology, and Treatment of Cholera, read a report, which was accepted and referred to the Committee of Publication.

Dr. H. Noble called up and moved the adoption of the following amendment to the Constitution, proposed by Dr. Hollister, in 1867:

Resolved, That there shall be a regular standing Committee on Necrology, whose duty it shall be to report, annually, brief biographical notices of deceased members. The same was adopted by the constitutional majority.

Dr. E. Powell, of Chicago, read a volunteer communication, relating to the Treatment of Periodical Fevers by the Hypodermic Injection of Sulphate of Quinine. The communication was accepted and referred to the Committee of Publication.

Dr. D. Prince, of Jacksonville, read a paper on the Operations for Removal of Stones from the Bladder. The paper was accepted and referred to the Committee of Publication.

Dr. T. D. Fitch proposed the following amendments to the Constitution:

1st. Creation of a new standing committee, called the Investigating Committee, or Board of Censors.

2d. An amendment to the paragraph relative to the election of permanent members, in Sec. 2 of the Constitution.

Amendment First.—There shall be appointed, annually, a Committee of Investigation, or Board of Censors, consisting of five members, whose duty it shall be to investigate all charges made against any member of this Society, or any organization auxiliary to this Society, and entitled to representation in it; to investigate the status of all applicants for membership in our organization; and perform such other duties as are usually required of such a committee.

Amendment Second.—The Permanent Members shall consist of all those who have served in the capacity of delegates, and of such other physicians as may be proposed by two members of this Society, reported on favorably by the Committee of Investigation, and receiving a two-thirds vote of all the members present. They shall be members in good standing of a regularly organized local (city, county, or district) medical society, entitled to representation in this Society, if such society exists in their immediate locality, or within a reasonable distance. Any member losing his membership in his local society shall, by proper evidence being furnished to this Society, forfeit his membership in this organization.

Laid on the table for one year, according to the rules.

Dr. S. T. Trowbridge, of Decatur, Chairman of the Committee on Legislation, read a report embodying the substance of a law to be submitted to the next Legislature.

Pending the consideration of this report, the Society adjourned until 2 o'clock P.M.

SECOND DAY—*Afternoon Session.*

The Society was called to order by the President, at 2 P.M.

The report of the Chairman of the Committee on Legislation being in order, Dr. W. S. Edgar, in behalf of a majority of the

members of the committee, presented and read a second report. After a discussion, in which Drs. Edgar, Niles, McArthur, Young, Robbins, Watson, S. W. Noble, H. Noble, Davis, and Prince participated, the following resolutions were adopted:

Resolved, That the Committee on Legislation, which is hereby continued, be instructed to secure, if possible, the passage of an act by the General Assembly, substantially the same as that reported by Dr. H. A. Johnson, for Legalizing Dissections.

Resolved, That the Committee on Legislation be instructed to secure the passage of an act by the General Assembly, embracing the main features of the reports of Drs. Trowbridge and Edgar.

On motion of Dr. Prince, Dr. Jayne, of Springfield, was added to the Committee on Legislation.

The following members were duly elected as delegates to the next annual meeting of the American Medical Association:

J. O. Hamilton, of Jerseyville.
D. L. Crist, of Bloomington.
D. W. Young, of Aurora.
H. H. Roman, of Springfield.
A. L. McArthur, of Rockford.
N. Wright, of Chatham.
I. T. Wilson, of Quincy.
S. W. Noble, of Bloomington.
H. S. Hurd, of Galesburg.
J. C. Corpus, of Mendota.
A. Niles, of Quincy.
S. T. Trowbridge, of Decatur.
G. R. Bibb, of Jacksonville.
Peter Young, of Mendon.
T. F. Worrell, of Bloomington.
H. W. Kendall, of Quincy.
T. G. Hickman, of Vandalia.
D. S. Jenks, of Plano.
C. Goodbrake, of Clinton.

Dr. D. Prince offered the following resolution, which was unanimously adopted:

Resolved, That the thanks of the Society are extended to the profession and citizens of Quincy, for the adequate provisions made for the exercises of the meeting, and for the hospitality extended to its members.

The Nominating Committee submitted the following report, which was adopted:

Committee of Arrangements for next Annual Meetiny—Drs. R. C. Hamill, S. Wickersham, Thos. Bevan, E. Powell, and G. C. Paoli, all of Chicago.

Standing Committee on Necrology—Drs. J. H. Hollister, of Chicago; F. B. Haller, of Vandalia; and W. S. Edgar, of Jacksonville.

Dr. D. W. Young offered the following resolution, which was unanimously adopted:

Resolved, That the thanks of the Society are hereby tendered to the Chicago, Burlington, and Quincy Railroad Company for their liberality in passing the delegates to this meeting over their road home free of charge.

Dr. Louis Watson expressed much regret and personal feeling on account of the action of the Society relating to the Quincy Medical Society, and asked leave to withdraw his name as a permanent member of this Society. After some remarks by Drs. McArthur, Young, Ralston, and Robbins, on motion, the whole subject was laid on the table.

The Society then adjourned until the third Tuesday in May, 1869.

N. S. DAVIS, *Permanent Secretary.*
JOS. ROBBINS, *Assistant* "

Editorial.

The record of Proceedings of the Illinois State Medical Society occupy so much more space than we expected, that we are obliged to omit from the present number both the clinical report and some book notices. They will appear in our next issue.

Chicago Medical College.—We have received the Tenth Annual Announcement of this Institution, by which the public are informed of some important changes. The two important chairs of Chemistry have been filled by the appointment of Prof. Wheeler, a gentleman of the highest order of attainments in that department of science. He has promptly established a laboratory for instruction in practical chemistry, which will give to the medical students advantages equal to those heretofore enjoyed only at Ann Arbor and Cambridge.

The clinical advantages have also been made more extensive by the appointment of Professors Johnson, Byford, and Bevan in the active staff of attendants in the County Hospital. This, added to the previous clinical advantages of Mercy Hospital, renders the means for bedside instruction equal to any institution in this or other countries.

But the item to which we wish to call the attention of our readers most particularly, is the full provision for the improved system of Medical College Instruction recommended by the Convention of Delegates from Medical Colleges, held at Cincinnati, in May, 1867. Nearly all the State Medical Societies in the North-West, as well as the profession at large, have emphatically endorsed this plan, and called earnestly on the colleges for its adoption in practice. They have now an opportunity to show the sincerity of their recommendations, by properly directing the students under their charge or influence.

Money Receipts to June 29th.—Drs. A. D. Andrews, $5; James Culbertson, 3; Stacy Hemenway, 5; H. C. Newkirk, 1.50; Thos. W. Howes, 3; W. D. Sterling, 3; B. Wilson, 3; F. K. Bailey, 2; James W. Mill, 1; George A. Bardwell, 3; H. P. Oggell, 3; J. B. Newman, 3; V. H. Coffman, 5; G P. Martin, 3; Wm. Dougall, 1.50.

A Hint for Women.—Mrs. Caroline H. Dall says: "I have looked in women's faces to see what marks their lives have left, and I tell you that it is a simple fact that women who habitually prevent impregnation grow cold, debased, unlovely in their expression; and that those who resort to abortion become sharp, irritable, and ungenial, everything in short that we mean by unmotherly."

Mortality Report for the Month of May:—

CAUSES OF DEATH.

Accident, drowned,	4	Dropsy	3	Manslaughter,	1
" railroad,	1	Dysentery,	2	Measles	5
" machinery,	1	Eczema, congenital,	1	Metritis, puerperal,	1
" revolver,	1	Enteritis, chronic	1	Meningitis	2
Angina	1	Erysipelas,	1	" cerebro-spinal,	4
Apoplexy	6	" phlegmonous	1	" tuberculosis,	1
Asphyxia	1	Exastisis of 2d cervical vertebra resulting in hemiplegia,	1	Myelitis	1
Birth, premature	13	Fever, puerperal	1	Nephritis acuto, resulting in uræmic convulsions,	1
" still	28	" scarlet	13	Old Age	2
" tedious	1	" typhoid	5	" and dropsy,	1
Brain, compres. at birth	1	" typhus	1	Paraphlegia, traumatic,	1
" congestion of	4	Gastritis	1	Paralysis	1
" disease of	1	" chronic	1	" general,	1
" dropsy of	1	Heart, disease of	1	Peritonitis	2
" inflammation	7	" organic disease	1	Phthisis pulmonalisis	36
" injury by blow,	1	Hemorrhage, internal,	1	" " and chorea,	1
" softening of,	1	Hydrothorax,	1	" laryngeal,	1
Bright's disease	2	" fol'ing phthisis pulmonalis,	1	Phrenitis,	3
Bronchitis	5	Hydrocephalus	9	Pneumonia,	18
" capillary	1	" acute,	3	" and pericarditis with hypertrophy of left and fatty degeneration of right ventricle	1
" chronic	2	Intestines, intussusception and ulceration,	1	Rheumatism, inflam'ory	1
Bowels, inflammation	3	Invagination ileus,	1	" back & spine,	1
" " & old age	1	Infanticide, by mother,	1	Skull, fracture of,	1
Cancer	1	Inanition	13	Small-pox	12
" of uterus,	1	Indigestion and old age,	1	" complicated with pneumonia	1
" of breast,	2	Inflammation caused by constipation of bow'ls,	1	Stomach, inflammation	2
" of neck & throat,	1	Insufficiency of aortic semilunar valves,	1	Suicide	3
Convulsions	36	Insanity,	1	Scrofula	1
" puerperal,	1	" resulting from epilepsy,	1	Tabes mesenterica,	7
Compound comminuted fracture of right femur	1	Intemperance	1	Tetanus traumaticus,	1
Chlorosis	1	Jaundice	1	Teething	10
Cholera infantum	1	Laryngitis, tubercular,	2	" and convulsions,	1
Croup	4	Liver, cirrhosis of	1	Unknown	1
" membranous,	2	Lungs, congestion of	3	Uterus, rupture of	1
Cyanosis	1	" abscess of	1	Total	321
Debility	5				
Delirium tremens	1				
Deficient nutrition,	1				
Diphtheria	4				
Diarrhœa	6				
" chronic,	1				

Deaths in May, 1868, 321 | Deaths in May, 1867, 241 | Increase, 80

Deaths in April, 1868, 305 | Increase, 16

AGES.

Under 5	167	40 to 50	23	90 to 100	0
5 to 10	22	50 to 60	17	100 to 110	0
10 to 20	16	60 to 70	7	Unknown	1
20 to 30	29	70 to 80	9		
30 to 40	27	80 to 90	3	Total	321

Males, 178 | Females, 143 | Total, 321

Single, 238 | Married, 83 | Total, 321

White, 310 | Colored, 11 | Total, 321

NATIVITY.

Chicago	126	England	7	Scotland	1
Other parts U. S.	62	Germany	47	Sweden	11
Bohemia	8	Holland	3	Switzerland	2
Canada	3	Italy	1	Unknown	3
Denmark	0	Ireland	38		
France	2	Norway	7	Total	321

DEATHS BY SMALL-POX.

For the Month of May, 1868.

6th Ward	1	13th Ward	4
7th Ward	1	15th Ward	2
11th Ward	1	Lake Hospital	1
12th Ward	3	Total,	13

MORTALITY BY WARDS FOR THE MONTH.

Ward.	Mortality.	Pop. in 1866.	One death in		Ward.	Mortality.	Pop. in 1866.	One death in	
1	3	9,648	3,216		14	19	12,108	637	1-4
2	15	12,985	865	2-3	15	32	15,766	491	1-8
3	16	15,738	983	5-8	16	11	14,912	1,355	7-11
4	19	10,884	572	4-5	County hosp.	14			
5	23	9,610	409	1-8	Unknown,	1			
6	19	10,680	556	8-10	Alexian Bros.	1			
7	21	18,755	893	1-10	Home of the Friendless,	2			
8	16	10,429	651	6-8	Soldier's hom.	1			
9	21	13,940	663	1-5	Mercy hos.,	4			
10	11	11,416	1,037	9-11	St. Luke's hos.	2			
11	13	12,924	994	2-13	Orphan asyl.	8			
12	28	12,695	453	3-7	Lake Hosp.,	1			
13	20	8,188	409	2-5					
Total,						321			

THE LATE DR. R. T. RICHARDS.—At the annual meeting of the De Witt County Medical Society, held on the 11th day of May, 1868, Dr. C. Goodbrake, from the committee appointed to draft resolutions expressive of the sense of this Society on the death of our late colleague, Dr. Richards, reported the following preamble and resolutions, which were unanimously adopted:

Whereas, It has pleased God, in His wise Providence, to remove from our midst and from a field of great professional usefulness, our highly esteemed friend and co-laborer in the science and practice of medicine, Dr. Rolla T. Richards, who died at Santa Anna, on the 12th day of March, 1868; be it therefore

Resolved, That we deeply feel the loss of our deceased friend and brother, who, by his upright, moral conduct, and gentlemanly deportment, had endeared himself to all with whom he became associated.

Resolved, That, in his death, the profession is deprived of one of its most zealous and devoted members, and the community of

a *good physician*, and one of her best and most patriotic citizens.

Resolved, That we feel a sincere sympathy for his widow in her great affliction, and can only refer her, with unfeigned confidence, to Him who has promised to be the widow's God.

Resolved, That the foregoing preamble and resolutions be spread upon the records of the Society; an attested copy sent to the widow of the deceased, and one to each of the medical journals published in Chicago, for publication.

C. GOODBRAKE,
J. WRIGHT,
Z. H. MADDEN. } *Committee.*

J. A. EDMISTON, M.D., *Pres't.*

C. GOODBRAKE, M.D., *Sec'y.*

1504 WALNUT STREET, PHILADELPHIA, *May 26, 1868.*

Dear Sir:—I am instructed by the Committee of Publication of the American Medical Association to call your attention to the following amendment to the "Plan of Organization," adopted at the late meeting held in Washington City, and to request you to forward the amount named to the Treasurer, 1303 Arch Street, on or before the 1st day of July, proximo, in order that the requisite number of copies of the forthcoming edition may be printed without delay. Very respectfully yours,

FRANCIS G. SMITH, JR., *Chairman.*

"The sum of $5 shall be assessed annually upon each delegate to the sessions of the Association, as well as upon each of its Permanent Members, whether attending or not, for the purpose of raising a fund to defray the necessary expenses of the Association, and for printing the Transactions. The payment of this sum shall be required of the delegates and members in attendance upon the sessions of the Association previously to their taking seats and participating in the business of the session. Permanent Members not attending shall forward their yearly dues to the Treasurer, and thereby shall be entitled to receive a copy of the Transactions, the same as delegates."

O'REILLY PRIZE.

Dr. JOHN O'REILLY, of New York, having offered, through the N.Y. Academy of Medicine, a Prize of Six Hundred Dollars for an Essay on the Physiology and Pathology of the Sympathetic or Ganglionic Nervous System, the Committee of Award, appointed by the Council of the Academy, have adopted, with the concurrence of the Council, the following regulations:

I. The competing essays shall be sent in to the Chairman of the Committee, Prof. J. C. Dalton, M.D., No. 101 East Twenty-Third Street, New York, on or before the First day of March, 1869.

II. Each Essay shall be marked with some distinguishing device or motto, and accompanied by a sealed envelope bearing the same device or motto, and containing the name and address of the writer.

III. The Essay selected by the Committee shall be transmitted by them, together with its accompanying envelope, to the Council of the N.Y. Academy of Medicine, under whose direction the envelope shall be opened and the name of the writer announced at the first meeting of the Academy in May, 1869.

IV. This Prize is open for universal competition.

V. The Committee have a right to reject whatever does not come up to a proper standard of merit.

ALFRED C. POST, M.D., *Pres't of the Acad'y*,
On behalf of the Council.

Committee of Awards.—J. C. Dalton, M.D., Professor of Physiology in the College of Physicians and Surgeons, New York; A. Flint, Jr., M.D., Professor of Physiology in Bellevue Hospital Medical College, New York; Alfred L. Loomis, Professor of the Institutes and Practice of Medicine in University Medical College, New York.

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ARTICLE XXVII.

ESSAY ON UNCONSCIOUS CEREBRATION!

Read to the Military Tract Medical Society.

By S. P. BREED, M.D., of Princeton, Ill.

[Published by Request of the Society.]

From the best information we have, the Pythagorians, some four hundred years before Christ, broached the theory that the earth moves.

Aristarchus, of Samos, a Grecian philosopher, is delivered down to us as the principal, *if not the first*, who maintained that the earth turns upon its center, and describes a circle around the sun. Such doctrines exposed Aristarchus to the severest censure of the sectaries of his time. Cleanthes, prominent among his enemies and calumniators, charged him with shaking, with rude impiety, the Throne of Vesta, who was worshipped as the patroness of fixed habitations and civilized life. Her sacred seat was represented to be near the center of the earth, and was declared to be always *fixed*, firm, and immovable. Whereupon, he was accused before the Court of Areopagus, of violating morality, and introducing innovation in religion. Just what punishment was inflicted upon him I have been unable to ascertain, though I have searched diligently through many ancient records, but that it was such as to make his name

infamous for *many centuries*, there is abundant evidence. By such unreasonable opposition, and such absurd objections, the the sublime philosophy of Aristarchus (the central theory of celestial science) was suppressed, and effectually held in abeyance *for nearly nineteen hundred* years, until the commencement of the sixteenth century, when Copernicus adopted and improved the hypothesis of the Pythagorians, which made the *sun* the center of the solar system, and the earth to move *not only* around the sun but around its own axis also; thus establishing the system of astronomy, which still goes by his name, and is, now, universally received as the true theory.

Apprehensions, arising from the novelty of his opinions, and also, doubtless, from the fate of Aristarchus, had, it is said, almost brought him to drop all thoughts of publishing his work, which had *lain* in his escritoir, not nine years *only*, which is the time Horace prescribes, but *nearly four times nine years.*

At length, however, its contents becoming known, and its merits canvassed and appreciated by a few of the more learned and intelligent, through the importunity of these, and his personal friends, he was, at last, prevailed upon to let it come out. But, *when* a copy of it was presented to him, *so great* was his *agitation*, in view of the *odium certain* to be cast upon him, and the relentless persecution with which he would be pursued, that he was *presently* seized with a violent effusion of blood, which put an end to his life on the 24th day of May, 1543.

Gallileo, nearly a century after, in 1612, observed some spots upon the *sun*, and, in his printed discovery of them, he ventured to reässert the truth of the Aristarchan or Copernican theory; and he brought forward several new arguments to confirm it. This startled the Jesuits, who, thereupon, procured a citation for him to appear before the *Holy Office* at *Rome*, in 1615, where he was charged with *heresy* for maintaining these two propositions, *viz.:* 1. That the sun is the center of the world (universe), and immovable by a local motion; and, 2. That the earth is not the center of the world (universe), nor immovable, but does actually move by a diurnal motion. The first of these propositions was declared to be *absurd*, false in

philosophy, and formally heretical, being contrary to the *express Word of God.* The second was also alleged to be philosophically false, and in a theological point of view, at least, erroneous in faith. "The Inquisition" pronounced sentence against him and his book. They obliged him to abjure his erroneous views, in the most solemn manner, committed him to the prison of their office during pleasure, which was until 1634, *nearly twenty years*, and his books were *gathered* and *burned* at *Rome*, and the *ashes scattered to the four winds of heaven.*

Notwithstanding this solemn abjuration, and the vigorous efforts of the *priesthood* to suppress his views, and keep the people in ignorance of them, the *arguments*, upon which his hypothesis *stood pillared*, became known, and those who were capable of judging soon saw that the evidences of their truth were such as to *command belief.* They saw that this theory explained many of the phenomena of the heavenly bodies, such as the seasons, eclipses, etc., which were quite inexplicable by the old Ptolemaic system, and that they addressed themselves so directly to the reason and judgment that they would be, *must be*, believed. Seeing and believing thus, they were encouraged to discuss these propositions among themselves, cautiously and prudently at first, but finally openly and boldly, till at length they were gradually accepted by the learned and more intelligent, and, finally, adopted as the basis upon which has since been erected the *solid and noble superstructure of modern astronomy.*

When the superstitious world found that they were no longer able to gainsay or withstand the arguments advanced in support of these doctrines, and also foresaw in their general adoption, while they persisted in their hostile attitude, the certain destruction of their cherished systems of false religion, they immediately changed their tactics, dropped their hostile guise, and rapidly reconstructed their religious views, so as to make them harmonize with these stubborn facts.

In a review of the history of science, in its progress up to its present status, one is struck with no little wonder, in tracing,

step by step, the advance of truth through the devious mazes of error, doubt, and prejudice, at the character of the opposition it has often met, and the great length of time this advance has been arrested and kept at a stand-still by the blind opposition and bigotry of those who should have been the first to herald its approach, and most eager to push it forward.

It is, moreover, a matter of no little surprise to us, *now*, as we look back from our present stand-point over the past, to see how very nearly some of the early philosophers came to comprehending many of the fundamental principles of the various sciences, and we are animated with a feeling of *holy* indignation to observe how long these truths were obscured and held in check by suspicious and designing men. It strikes one with wonder, also, now, to see the singular obtuseness of the masses oftentimes in apprehending the facts and arguments which it seems to us, should have been sufficient to arouse their minds to sensibility and investigation. But so it is, the progress of scientific truth was so often retarded by the sinister opposition of the suspicious and the absurd objections of the ignorant, that much valuable time, great patience, and extraordinary energy were required to overcome the obstacles constantly thrown in its path; and it was not until the great body of the people became so enlightened as to decide these questions for themselves, instead of looking to *priests* and *rulers*, that science has made any considerable progress among them.

Wm. Godfrey Leibnitz, baron of Leipsic, as long ago as 1685, in his Protogea, advanced the Igneous theory of geology, by which he explained the formation of the earth, and the subsequent changes of its crust, corresponding almost exactly with the one so generally adopted *now* by geologists under the name of Igneous Agency. This theory, so early enunciated, must have been still-born, for we hear nothing more of it until 1749, nearly a hundred years afterwards, when Buffon, the French naturalist, produced an elegantly written hypothesis upon the formation of the earth, based chiefly upon the views of Leibnitz. These views, thus exhumed, gave great offence to the Faculty of Theology at Paris, and he was obliged, like Gallileo, to

recant opinions which are now maintained by all geologists. So the matter rested for almost another century. In the meantime "the world moved on." Investigations by scientific observers, in different parts of the world, were carefully made; facts bearing upon the subject were accumulated in great numbers, until, by careful comparison, free and thorough discussion, sufficient data were procured to enable the truth of the Igneous theory to be made out.

But the pseudo-religionists, *now* as in the former case, when they found that they were no longer able to meet the arguments in support of geology, nor make any effectual stand against the progress of these scientific truths, and, moreover, when they saw the ground upon which they stood fast giving away beneath their feet, and their whole structure of false philosophy *tottering*, *then*, very reluctantly, made a virtue of necessity, and did as their predecessors had done before, in regard to the Copernican system of astronomy, ceased their blind opposition, and again reconstructed their religious theories in accordance with the inexorable logic of events, and made them harmonize with those inflexible facts they could no longer successfully controvert.

The learned mathematician Leibnitz, in 1685, also advanced the startling doctrine of "Unconscious Cerebration." This announcement was, it seems, still more unfortunate than his new doctrine of geology. Nothing was said, and very little known, about it after its declaration, until some twenty years ago, when Dr. Carpenter, without knowing that he had been preceded, advanced the theory of Unconscious Cerebration to account for some anomalies of mental action. After satisfying himself in regard to the probable truth of the theory, he submitted his views to two of the profoundest thinkers of the age, Sir Wm. Hamilton and Mr. John Stuart Mill. From the former he learned that the same doctrine had been advanced some two hundred years before, by Leibnitz. By the latter, he was assured that the unconscious development of a subject of thought was so familiar to him, that, when he found it difficult to pursue an inquiry further, not seeing his way clearly through

its entanglements, he was accustomed to lay it aside for weeks, or even months, and to devote himself to other objects, with the full expectation of being able to pursue his first investigations with diminished difficulty whenever he resumed it. Notwithstanding this high authority, this doctrine has made very little progress in the minds of the learned psychologists of the day. Perhaps *the great reason* why this doctrine has not been accepted by the scientific world arises from the indisposition to regard *mind* in connection with *organization*, *from the fear* of favoring the *opinion* that *mind results therefrom.*

Moreover, many are probably deterred from investigating this subject as they might, from the jealous fear always actuating the opposers of science, of finding something that will disturb the established dogmas of the day. But as honest searchers after truth, we should not shun a careful investigation of so important a matter, nor should we allow our previous opinions or prejudices to forestall our judgment, or divert the current of our thoughts from tending whithersoever the evidence may carry them. If we do this, I apprehend we shall find that *mind* which, at a first view, at times, appears so absent and so abnormal is, in reality, *after all*, no exception to all other phenomena in nature. The more we study this subject unbiasedly, I think, the more certainly will we be led to the conclusion that the mind is as much under the presidency of law as any other function of the body. Every thought, every impulse, and every proclivity is but the legitimate result of a definite cause, and these causes follow each other, and their antecedent causes, with as much regularity, precision, and certainty, as any such necessity in the physical world. There are subtle laws pervading every department of mental activity—running through and through all the avenues of the mind, conscience, reason, judgment, and the affections which control, direct, regulate, and moderate or intensify all our schemes, speculations, and determinations. From these all-permeating, yet unseen, laws, result all our confidence in the virtue and fidelity of our fellow men. From these latent forces arise all the exalted aims, the noble and sublime achievements of the

great and the good as well as the low and the bad. Upon them rest all our attachments, affinities, and cherished relations of mind with mind. The mental *eye* looks out into the world, around, through these variously colored media, as a kind of kaleidoscope which may, by reflection, refraction, transposition, or polarization, magnify or diminish the objects and views, giving light and shade, tint and color, with as much respondency to law, with as much certainty and regularity as any phenomena of light and optics in natural philosophy.

As the natural eye, in looking through an uneven pane of glass, will see objects distorted and comic, so will impressions upon the *cerebrum* so modify its nutrition, by some delicate and peculiar molecular change therein, as to change the whole mental character, by *intensifying a certain class of impressions* upon the consciousness of the individual, to the *exclusion of others*. Hence, we have mental as well as optical illusions; objects party-colored and distorted, magnified or diminished, so as to control opinions, produce unnatural attachments, sharpen censures, or infuse unwonted severity into penalties and judgments.

The cerebrum in man, therefore, is a wonderful instrument of capabilities, caprices, and powers. It is owing to the much larger development of this part of the brain over the lower animals that gives to *man* his preëminence over all other orders and species of the animal kingdom. By reference to comparative anatomy, it will be found that the relative *proportion of this organ* diminishes as we descend from the higher mammalia to the lower, from them to the birds, from thence to the reptiles, and from these again to the fishes.

The brain is placed in relation with the outside world through the senses. The various sensory impressions are thence conveyed, through their respective and appropriate nervous filaments, to the sensorium, located in the sensory ganglia. Under the term sensory ganglia, may be included that assemblage of ganglionic masses lying along the base of skull in man, and partly included in the medulla oblongata, in which the special senses, seeing, hearing, feeling, tasting, and smelling, have their central terminations.

It seems to be a peculiar arrangement of the nervous apparatus, that excitor impressions should travel upwards, if they meet with no interruption, until they arrive at the cerebrum. When they reach the sensorium, they make an impression on the *consciousness* of the individual, and thus give rise to a sensation; and the molecular change thus induced, being further propagated from the sensory ganglia to the cerebrum by reflex action, becomes the occasion of the formation of an *idea.* If, with this idea, any pleasurable or painful feeling is associated, it is *called* an *emotion*, and, either as a simple or emotional idea, it becomes the subject of intellectual operations, whose final issue may be a volitional determination which may be exerted in checking or producing muscular motion, or in controling or directing, to some extent, the current of thought.

On the reception of sensory impressions the changes which they produce in the sensory ganglia give rise to a new excitement of nerve force, which is propagated along the *ascending fibers* to the *vesicular matter* that forms the *surface* of the cerebral hemisphere; and *it is not* till they *arrive* at the *ulterior termination* of these *fibers* that their *impressions produce* those *changes* which are *instrumental* in the *formation* of IDEAS, and subsequently in the *higher* and *more complicated intellectual operations.* These intellectual operations, *themselves now*, become the source of new changes in the condition of the vesicular matter of the nervous substance, and an excitation of nerve force takes place *here* as their result, which, transmitted downwards to the sensorium, gives rise, through it, to appropriate respondent movements. The *sensory ganglia*, therefore, let it be remarked, constitute the *seat* of *all consciousness*, *not only* for *impressions* on the *organs* of *sense*, but *also* for *changes* in the *cortical substance* of the *cerebrum.* So that, it is not until these changes have reacted downwards upon the sensorium that we have any knowledge or consciousness of the formation of ideas, or of any intellectual processes which may be going on there. The cerebrum, therefore, on the receipt of impressions, reflected from the sensorium, immediately commences the operation of working up the materials submitted to it. This process

may continue unconsciously to us, unless interrupted by new impressions, in which case the former process seems to be temporarily arrested, until the import of the new intelligence is fully made out, when the *cerebration* is resumed, with such modifications as the new information may seem to require, or pursued after the tenor of the former train. Hence, we often see a *trivial incident*, seen perhaps a thousand times before, without making any notable change in the current of thought, produce the most striking, unlooked for, and important results. An intercurrent thought thus striking the mind at a particular juncture, incidentally, while it is in a peculiarly excited state of inquiry, when the cerebrum seems to be casting about for more facts, and the thoughts break loose, as it were, from former combinations, reaching and *feeling out around* for more materials; *it is at such* a *time* that *some mere trifle*, *some apparently insignificant circumstance*, will wholly *change* the *current* of *thought*, and *divert it into* a *fruitful field* of *important discovery.*

Sir Isaac Newton had, doubtless, seen apples fall a hundred times before, but as his mind was not in this "*statu-nascente*" condition, no important results followed. But *now*, when his mind was on the *qui vive* for new truths, new facts, to bring to the test certain theories evolved from previously received data, *then it was* that this little incident, the most trivial in nature, coming in just at the right time, and springing a felicitous train of thought, gave such a new direction to his investigations as, followed up to their legitimate conclusions, resulted in the *most stupendous discovery* of *any age.* Newton made this discovery, not because he *willed* it, but because he could *not help it.* It was, in a very important sense, an unavoidable result, the evitable evolution of his philosophic brain. The office of the organs of sense *is simply* to supply the crude materials, while it is the province of the cerebrum to receive and work up those materials, solve the problems, and transmit the results down to the sensorium, from whence they are utilized in the practical voluntary affairs of life.

The cerebrum may not inaptly be compared to a jury, while

the organs of *sense* may represent the *witnesses*. The jury, after hearing the evidence, retire to a private room, where, by themselves alone, they compare notes, weigh the evidence, and finally work up the case into a verdict. So it is with the cerebrum. She takes particular *note* of all impressions transmitted to her from the organs of sense, and having thus supplied herself with all the evidence she can obtain, she modestly retires to the secret chamber of unconsciousness, where, by a thorough process of careful comparison, sifting, weighing, and discrimination, a *decision* is *reached*, or, in case of no decision, which sometimes happens, then, in this event, either the judgment is suspended for further testimony, or the *jury hangs*—when the matter is indefinitely postponed. It may be remarked, that, with the great majority of mankind, on some of the most important questions of practical utility and philosophic interest, either there has been a premature decision, or the *jury has hung*.

There is much ground for the *belief* that every sensory impression which has once been recognized by the perception, is registered (as it were) in the *cerebrum*, and may be reproduced at some subsequent time, although there may be no consciousness of its existence in the mind during a long intermediate period. Instances are of frequent occurrence in which ideas come up before the mind during delirium or dreaming, and are expressed at the time, although the individual may not be able to remember ever to have heard them before, they yet having been proved to have been heard at some long antecedent period. Dr. Carpenter relates the case of a lady during a delirium of fever who continually repeated sentences of Hebrew and Chaldaic, of which she stated herself, on recovery, to be perfectly ignorant; but on tracing her former history it was ascertained that, in early life, she had lived, as servant maid, with a clergyman who used to walk up and down the hall of his dwelling repeating aloud these passages, which she must have retained in her memory unconsciously to herself.

While preparing this essay I was requested by Dr. Anthony to visit his father-in-law, who was then lying very sick. This

gentleman was between seventy and eighty years old. In relating the history of the case, the Doctor said that his mind had been failing for several months. Among the first signs of mental aberration they noticed that he talked about, and manifested great anxiety in regard to, the *cattle* and *sheep* on the farm (by which I knew at once that he had been a farmer), which, he said, were not properly cared for. He had not lived on a farm, nor had anything to do with one for many years. He often inquired about his children, how they were to be supported and educated, though they were all quite grown up, and well settled in life. It is noteworthy that these were the very subjects that occupied his mind some thirty years before. He imagined, also, that he had to take the care of, and support, a colored woman and three small children, which gave him great concern. He talked much about their destitute condition, and repeatedly urged that they should be immediately attended to. When I inquired whether he had ever in his former life had destitute colored neighbors appealing to him for assistance, I was answered, "No, but that he used to be an ardent Abolitionist, and always manifested great sympathy for the colored race in a state of slavery." Here, then, you see we have another striking instance of a long-registered impression spontaneously reproduced, after the lapse of some thirty years, during the general wreck of the mental faculties.

Of the precise nature of the changes by which sensory impressions are thus preserved, we are, in the present state of psychological science, entirely ignorant, but it must be somehow intimately connected and interwoven with the nutrition of the cerebrum, since we do know that alterations in that structure have a marked effect upon the memory.

It is no very uncommon thing for a person to dream the *same thing* over the *second time*, or in a *second dream* to *renew* a former train of thought, taking up the thread just where it was left off in a prior dream. Indeed, some of the most complicated problems in mathematics have been solved during sleep, which had puzzled the brain for hours previously. The process of solution of a difficult problem, interrupted, unfinished, or left

because the person could not see his way through it clearly, has been resumed and completed during sleep, by the student rising at night, in a state of somnambulism, and committing it to writing, and the person again retiring to bed. In the morning the student was greatly surprised to see the problem wrought out, *in extenso*, in his own handwriting. So well understood is this matter of unconscious cerebral activity that many persons, when they have a tedious and difficult question to solve, which they cannot readily do, they choose rather to leave it to be wrought out in this way, feeling confident, from past experience, that it will be done. Even the aborigines of our country seem to have some knowledge of this anomaly of mental action, for it is said that they make it a point never to decide a weighty and important matter until they have deliberated well and slept upon it.

It is, in fact, the province of the cerebrum *to think*, as much as it is the office of the lungs to decarbonize and oxygenize the blood, or the stomach to digest food, or the liver to secrete bile. These functions are all carried on in much the same way, under one uniform law of cell-action. Neither one of these functions is entirely under the control of the *will*. All are more or less involuntary. The healthy brain, supplied with suitable materials and conditions, *will think*—think automatically and continually, whether we *will* it or not. We may, it is true, by an arbitrary exercise of the will, modify and control the *current* of our *thoughts*, and educate the mind to certain methods and modes of thinking, until, by long discipline in the habit of close, careful, consecutive thinking, we may acquire great power of reason, and may thus accomplish astonishing results, but *after all this* is *admitted*, *it is* only when we *intentionally* divert the current of our thoughts from the *channel* in *which they were running*, when we determine to put our mind in operation in some *particular* way or manner different from what it is acting, that we can be said to use the *will* in the act of reasoning; and this arbitrary exercise of it I believe to be much more rare than is generally supposed. Hence, then, we seem justified in *affirming* that the cerebrum may, and very

often does, act upon impressions transmitted to it, and may and does actually elaborate results, such as might have been attained by a volitional direction of our minds to the same subjects without any *conscicusness* on our part. The experience of most men will readily furnish numerous instances of this kind of cerebral activity.

As the *spinal axis never sleeps*, but, by its constant diffusion of nervous energy, keeps up throughout the body that persistent, tireless state of muscular *tension*, so necessary to the support of the framework and the internal viscera, so do we believe that the cerebrum is constantly acting its part, continually evolving thought so long as the vital forces, the vaso-motor and cell-action continue. If the circumstances connected with the thoughts are such as to favor their reaction downwards upon the sensorium, we are *then* made conscious of them, otherwise we are not. When the avenues, the organs of sense, are closed, or the susceptibility of the sensorium to external impressions is temporarily, and more or less completely, suspended, as in profound sleep, or when its functions are held in abeyance, by the preöccupation and concentration of the mind upon one subject in which its whole faculties are engrossed, the cerebrum *then also* acts unconsciously to us. The *mode* and *character* of the *thoughts* are, therefore, in a great measure, the consequence of the reaction of the cerebrum upon the circumstances which call it into play. While the cerebral, like all other functions of the body, is subject to periods of greater activity and partial repose, it by no means follows that there is at any time a total cessation from all activity in the case of the cerebrum any more than the spinal axis.

Intellectual labor is always, sooner or later, attended with a sense of fatigue, and is also accompanied with cell-metamorphosis, common to all other structures and physical exercises. The products of the disintegration of the brain are always found in the excretions of the body after severe mental labor.

In the delirious ravings of intoxication and of fever, or the perverted reason of the lunatic, we have the same evidence of cell-change that we do in the sayings and doings of the same

individuals in a state of health, or normal condition; and I have often thought there is a striking analogy between tissue formation and ideation.

The primary fundamental principle of all organized structures is cellulation. In the normal state these cells are of a determinate character, and a particular kind. The cells are regular and uniform, and the process of cellulation proceeds after a particular type, and goes through the necessary changes successively until they arrive at their ulterior destiny of healthy structure. But in disease, as in cancer, for example, the cells are quite irregular, caudate, fusiform, seniform, spindle-shaped, etc., while they possess increased formative activity. There seems to be an effort to produce healthy tissue, but the action is modified by occult intercurrent causes so that no healthy structure is formed. So it is in delirium and insanity, we have cerebration disordered, visions distorted, conceptions abnormal, sights unusual, figures fantastic, but it is evident that there is a disposition all the time to ideation more or less correct and coherent.

Prof. G. B. Wood, of Philadelphia, once attended a portrait painter through a period of delirium tremens, who, on recovery, in compliance with the Doctor's request, executed a beautiful painting, in which he exhibited, on canvas, the figures and images so indelibly impressed on his memory during his illness. There was one striking peculiarity of this painting. It was this: While part of almost every figure was natural and correct, other parts were as invariably distorted, unnatural, and fantastic; as, a man with the head of a horse, a dog with one side of his head swelled out into irregular and huge proportions, and altogether abnormal; or some *fantastic appendage* to a *natural figure*. Dr. Wood, when he came to his lecture on Delirium Tremens in his course, used always to *present this picture to his class*, and I was told that he prized that picture more than any other in his *museum*. To the psychologist it was, indeed, a very interesting painting. So it is, then, to use a strong synecdoche, a *thought* is but the *bursting of a cerebral cell!* As muscular contraction is effected by the rapid ruptur-

ing and reformation of sarcous cells by *nerve force;* so is ideation and ratiocination but the result of the moulting and regeneration of cerebral cells, under the influence of nerve force; or, as the muscles are the instruments for the correlation of nerve force into mechanical power, so is the cerebrum the substratum or instrument through which nerve force is converted into mind. If the brain be healthy and the blood pure, and the circumstances surrounding, and calling it into action, normal, the mental imagery will be perfect, and the *idea* will come forth *full*, *plump*, and *round*, like a *precious coin struck* from the *mint*, and will pass current in the world of thought. But if the brain be diseased, or the mental stimulus, the blood, be loaded with noxious and poisonous matters, *then*, the cerebration will surely be abnormal.

If it be objected that we cannot understand just how nerve force is converted into mind, we might reply, that, neither do we yet quite understand just how *any one* of the physical forces is metamorphosed into *another*. The *modus operandi* of the conversion of electricity into magnetism, and nerve force into mechanical power, is just as mysterious and incomprehensible as the merging of nerve force into mind. So it is, also, with the other forms in which force manifests itself. We are able, however, to discover the apparent annihilation of the *one*, and, by careful observation, we have been able to estimate beforehand the absolute equivalent of the other.

When we have learned more about the dynamics of the nervous system we shall be better able to understand and explain what now appears obscure. If the objector will please to explain the *modus operandi* of the conversion of *nerve force* in the *inferior animals* into INSTINCT or *brute mind*, then, I will, by the same parity of reasoning, explain the *correllation* of *nerve force* into *mind force* in MAN. The *instinct-mind* and *sagacity* of the *brute differ* from the *mental faculties* in *man* in NO OTHER *respect* than that of *degree*. The cerebral organs adapted to *similar functions* are singularly *analogous* in *them all.* When we fully understand the *one*, we *shall have* a *sure* key to the explanation of the other. It is as unnecessary to call in

the aid of a "*Deus ex machina*" to help to explain the phenomenon in the *one case* as the *other*. The forces of mind, and the elements of matter, are, in both cases, taken from the *universe with life*, and *restored* to it at *death*. Life and death are antithetic, and *exactly opposite terms*. Life kindles our faculties into conscious existence, and death destroys what life enkindles, so that death must place us back "*statu quo ante vivum*." As we can trace our identity no further back than the commencement of organic life, so does it follow, logically, inevitably, that we will not be able to trace it forward into the future further than death. The idea that man may retain the power of thought after the destruction of the brain, is too absurd to bear the test of careful scrutiny. It is unphilosophical, and contrary to all analogy. It is a figment of the imagination, and a relic of barbarism and superstition.

It is an interesting fact, and one that has much bearing on involuntary cerebration, that some of the most celebrated men for intellectual and artistic ability, have been *mere imbeciles* on all other subjects except those in which they thus excelled. Dr. Carpenter gives two cases, in which the mental action which evolved the result, seems to have been of an automatic character. All accounts of Coleridge's habits of thought, as manifested in his conversation (which was a sort of thinking aloud), agree in showing that his train of mental operation, once started, went on of itself, sometimes in the original direction for a long distance, sometimes with a divergence into some other track, according to the suggestions of others, or circumstances. His whole course of life was one continued proof of the weakness of his will; for, with numerous gigantic projects continually in his mind, he could never bring himself seriously to attempt any one of them; and his utter deficiency in self-control rendered it necessary for his welfare that he should yield himself to the control of others.

The composition of the poetic fragment "Kubla Khan" in his sleep, is a typical example of automatic mental action; and almost his whole life might be regarded as a sort of waking dream, in regard to the deficiency of that self-determining

power which is the preëminent characteristic of every really great mind.

The whole artistic life of Mozart, from his infancy to his death, may be cited as an example of that spontaneous or automatic development of musical ideas, which expressed themselves in the language appropriate to them. When only four years old he began to write music, which was found to be in strict accordance with the rules of composition, although he had never received any instruction in them. And when engaged, in adult life, in the production of those works which have rendered his name immortal, it was enough for him once to fix his thoughts in the first instance upon the subject (the libretto of an opera, for example, or the words of a religious service), so as to give them the requisite start or direction, and *then* they flowed onwards without any effort of his own, so that the whole of a symphony, or an overture, would be developed in his mind, its separate instrumental parts taking their respective shapes without any intentional elaboration. In fact, the only exercise of the will that seemed to be required on his part, consisted in noting down the composition when complete. It is recorded of him, that, being once asked by an inferior musician how he set to work to compose a symphony, he replied, "If you once think how you are to do it, you will never write anything worth hearing. I write because I cannot help it." Mozart, like Coleridge, was a man of extremely weak *will.* He could neither keep firm to a resolution, nor resist temptation, and, when not under the guidance of his excellent wife, was the sport of almost every kind of *impulse.* But there probably never was a more remarkable example than his musical career presents, of the automatic operation of that creative power which specially constitutes genius, and his life is altogether a most interesting study to the psychologist.

But there is an instance of a somewhat similar kind, later, and in our own country. You have all doubtless heard of "Blind Tom," the negro boy, who is an *idiot* on all subjects but music. He, however, possesses extraordinary powers of mind on this *one* subject. He can execute the most difficult

and complicated pieces of music after hearing them *but once.* It is claimed that he does this from memory, and his inherent and intuitive sense of the beautiful and appropriate in music. I am indebted for the following facts to Mr. G. Gilbert Gibbons, Esq., of Princeton, who, in his able argument in defence of John Card, being tried for the murder of his wife, stated, that, at one time, while in Chicago, he attended a public exhibition given principally for the purpose of testing the musical powers of the negro boy "Blind Tom." Baumbach, the pianist and composer, played, for the first time, one of his most difficult and lengthy pieces. "Blind Tom," on being brought into the room, as soon as the music began, commenced and continued whirling rapidly around on one foot, until the music ceased, when, to the astonishment of all present, he seated himself at the piano, and, not only played the piece through without making any mistakes, but according to Baumbach's own admission, and the universal opinion of the audience after the performance, he actually improved upon the author himself, in purity of tone, accuracy, delicacy, and celerity of touch, and felicity of expression. Many such examples, doubtless, might be given to show that the cerebrum has a way of its own of doing business independent of the will.

The molecular changes constantly going on in the cerebrum as inevitably produce thought as the same molecular changes in the spinal axis produce nerve force, or the cell-action in the liver produces bile, or the same action in the glands produces the various secretions of the body. The difference in the result is owing *alone* to the difference in structure and the circumstances. In each case there is a special structure adapted to the performance of a special function. Nerve force is correlative mind force, vital force, electric force, etc. In fact, it may be declared that there is *but one force* in nature, and that force is *always acting* in *some way* or *other;* and, moreover, is *not subject* to *either increment* or *diminution.* Matter and force, therefore, are eternal and forever the same in amount. One is as equally indestructible as the other. It follows, therefore, that, when one form of this ever-changing force is metamor-

phosed into some other equivalent force, and, hence, seems to be annihilated, it is in reality *only acting* in some other way—appearing in some other form. Force can neither originate, *de novo*, nor cease to operate in some of its protean forms. Thus, when motion is retarded by friction, *heat* is generated. If the rubbing surfaces are heterogeneous, electricity, as well as heat, is the result.

The fact that one force can, *at will*, be transformed into another, and the equivalent of the new force be determined beforehand with mathematical certainty, marks an era in Physics, Physiology, and Psychology.

Prof. Samuel Jackson's discovery of the correlation of forces, and Schwann's discovery of the animal (I might say the universal organic) cell, are destined to effect as great a revolution in physiology and psychology as the theory of Aristarchus and Copernicus did in astronomy, or that of Leibnitz and Hutton did in geology. "Verily, the world moves."

Planting our feet firmly upon these "look-out mountains" of physical science, as we survey, from this new vantage-ground, the more airy regions of psychology, we may smile at the impotent assaults of, and bid defiance to, our *old enemies;* while they, perhaps, recovering from their temporary dismay and discomfiture, rallying once more in defence of their long-cherished dogmas, marshalling again their scattered hosts for the final *onset*, we expect to see thousands of untried steel leap forth from rusty scabbards in the defence of *truth*, and, by the collision of opposing weapons, *one resplendent blaze* of *intellectual light* and *moral grandeur* shall be *enkindled*, waxing brighter and brighter, until every species of vice and error shall be dispersed by the *irradiating* beams of truth and reason. Then shall the disciples of a *vague* and illusive religion, the victims of error and superstition, and the votaries of Transcendentalism and Empiricism, catching a glimpse of their own *mental obliquity*, startled by a *view* of their own *perverseness*, rush with horror from the ghastly monsters they have been so long straining to their bosoms; *recoiling*, catch the inspiration of the age, vitalized and electrified into a new existence, still

again readjust and reconstruct their falling systems and visionary theories, so as to make them *harmonize* with the inexorable logic of these scientific discoveries and a rational philosophy, and be constrained to acknowledge that "*the world moves.*"

ARTICLE XXVIII.

IMPROVED FORM OF THE ENDOSCOPE.

By E. ANDREWS, M.D., Prof. of Principles and Practice of Surgery, Chicago Medical College.

[Read to the Illinois State Medical Society, May 20, 1868.]

The object of the endoscope is the examination of cavities of the body not accessible to ordinary vision. The form best known in this country is the one invented by Desormeaux, of Paris. It consists essentially of three parts, *viz.:* the lantern, the perforated mirror, and the tube. The lantern is an enclosed lamp, filled with burning fluid, having on one side a concave reflector (R Fig. 4), whose function is to send back the rays which fall upon it, so as to increase the light thrown in the opposite direction. The light, thus re-enforced, falls upon a lens (L, Fig. 4), which condenses it upon the perforated plane mirror (M, Fig. 4). The latter being set at an angle of forty-five degrees, throws the light in a condensed beam into the tube (C, Fig. 4), and strongly illuminates the interior of any cavity into which the tube is inserted, rendering it visible to the eye placed at E, Fig. 4, where it looks through the perforation of the mirror directly into the tube.

The principle is plain, but the practical difficulty is, that unless the apparatus be in perfect order, the light fails to reach the bottom of such a deep, narrow tube in sufficient strength to illuminate and render visible the membranes at its extremity. So great is this difficulty that I apprehend that the iustrument, in the form devised by the European inventors, will never come into extensive practical use. In order to overcome this evil, and produce an instrument which will display its objects when

under such management as it would be likely to get in ordinary hands, it is necessary to have a more intense light than can be obtained by any common lamp. I have, therefore, devised an apparatus for burning a magnesium wire in the flame of the lamp, which gives an illumination of such intensity that it can only be compared to the blaze of the noonday sun. This attachment is very simple, and is represented in the sectional view, Fig. 3, in which L is the lamp, and F the flame. S is a revolving metallic spool, on which the wire is wound; and P represents an inclined plane, along which the wire passes. Through an opening in the side of the lantern the wire enters the tube T, which conducts it to the flame of the lamp. If, now, the thumb be pressed upon the inclined plane, and then moved upward, it will slide the wire forward, and cause it to enter the flame, where it burns with a brilliancy far superior to that of the best lamp. I at first intended to have the wire advanced to the flame by means of springs and wheels, but a little experimentation convinced me that this would complicate the apparatus too much, and that it was better to simply slide forward the wire by the pressure of the thumb. The spool itself may be dispensd with, without inconvenience, the observer simply taking a piece of the wire and inserting it without winding it upon anything.

The endoscope is adapted to the inspection of all deep cavities and mucous passages into which a straight tube may be passed. It may be used for examining the ear, the rectum, and the bladder, as well as the interior of abscesses. It may be passed into the track of bullet wounds, to distinguish broken bones from impacted balls, and to detect pieces of cloth and other foreign bodies. It has been even inserted through punctures into ovarian tumors, to examine their interior. Calculi in the bladder have also been detected by it. Its principal practical use, however, is the examination of the interior of the urethra, as a means of diagnosing its different diseases, and of ascertaining the progress of the cure.

In order to understand its usefulness for this purpose, a few remarks on the pathology of the urethra are necessary. The

healthy urethra is lined with a smooth membrane, of a light pink hue, like that of most other mucous canals. When collapsed, its walls fall together in five or six longitudinal folds, so that, seen through the endoscope, the folds, prolapsed over the end of the tube, present a radiated form, as shown in Figs. 1 and 2. If the membrane be inflamed or congested, it presents a deeper red; and if anæmic, it is seen to be abnormally pale. The most important revelation of the endoscope is the complete establishment of the fact that the mucous membrane of the urethra, like the conjunctiva oculi, is subject to a granular inflammation, and that this disease constitutes the true lesion in many chronic gonorrhœas. Some years ago this idea was broached in Europe, and experiments were made on abandoned women, hired for that purpose, which showed that granular ophthalmia might be inoculated into the urethra, and there produce a perfectly similar disease, which could not be distinguished from chronic gonorrhœa. The want of a proper instrument for inspection, however, rendered the demonstration rather difficult and unsatisfactory, and this important discovery fell into obscurity. Desormeaux's instrument has brought this fact again into notice, and given good reasons to believe in the following propositions:

1. True chronic gonorrhœa, is a granular inflammation, identical in nature with the granular inflammations of the eyelids, of the cervix uteri and of the larynx; and one may be produced from the other by inoculation.

2. When this disease exists, it has no tendency to spontaneous recovery, but will last indefinite years unless treated, and will communicate contagion as long as it continues.

This disease often persists long after the patient believes himself or herself free from the clap, and hence the frequency with which men contract gonorrhœa from females whom they believe, and who believe themselves, to be free from disease.

The chief use of the endoscope is the diagnosis and treatment of this disease. In order to employ it to advantage, a variety of tubes are required, but the smallest should at least equal a No. 10 catheter. The tube is first detached from the lamp,

Fig.1

Fig.2.

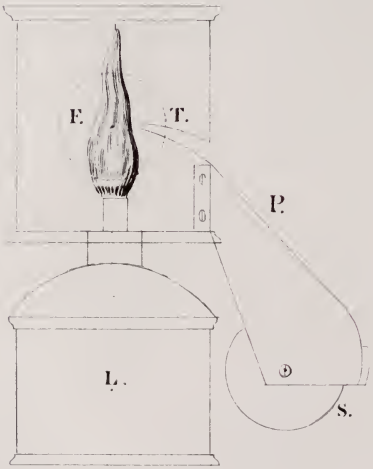

Fig.3.

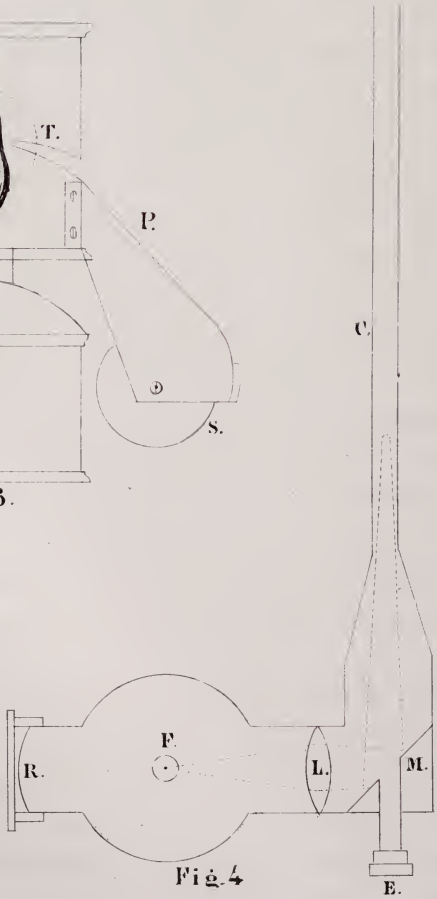

Fig.4

Chicago Lithographing Co. Chicago.

oiled, and a core is placed in it, which projects in a rounded extremity beyond the tip, to facilitate the entrance. If the urethra is too contracted, it must first be dilated. The tube should be passed pretty nearly to the prostate gland, when the core is withdrawn and a pledget of cotton pushed through it into the urethra beyond, to prevent the flow of mucus or other fluids into the tube. This pledget may be left there, to be expelled by the next passage of urine. Attaching the lamp, and applying the eye to the instrument, the tube should be gradually withdrawn, so that every part of the canal successively prolapses over the extremity of the tube. At the same time the magnesium wire is kept burning, and thus the whole interior of the urethra is inspected. The appearance of the granular disease thus seen is represented in Fig. 2; while the healthy urethra is represented by Fig. 1.

The applications to be used here are precisely those found most useful in granular conjunctivitis, *viz.*, nitrate of silver, sulphate of copper, tannin, alum, acetate of lead, subnitrate of bismuth, carbolic acid, etc. An injection of one part of carbolic acid, dissolved in three parts of linseed oil, frequently has a powerful effect in arresting the suppurative discharge, though it is rather severe treatment. In Paris, at the present time, great advantage is claimed for the use of powders blown in through the tube and dusting the interior of the urethra. In my own practice, I commonly carry in the powders on a pledget of cotton wound on the end of a wire. For this purpose, nitrate of silver, sulphate of copper, and various other medicaments, may be finely pulverized, along with subnitrate of bismuth, using a greater or lesser proportion, according to the strength required.

Granular inflammation of the urethra, like the same disease on the eyelids and in the cervix uteri, is extremely slow and obstinate—several months, and often a year or more, being consumed in the cure. As long as the endoscope shows any of the granulations remaining, so long the disease exists, and its contagiousness continues. During all this time the discharge may be scarcely worthy of notice, and not at all purulent, but a

slight irritation serves to rouse the granulations into activity, so that the patient, without being subjected to any new contagion, may have all the symptoms of a new attack of acute gonorrhœa. Chronic urethretis and metritis, like granular conjunctivitis, may be communicated in a quiescent form, the granulations springing up gradually, accompanied by a slight irritation, without the patient ever passing through the symptoms of ordinary acute clap. Hence, many persons will give gonorrhœa to others who are utterly unaware that they have ever had the disease themselves. This is one reason why the weekly medical examinations of strumpets, under the license systems of France and Prussia, have proved so worthless for restraining the spread of venereal disease. The quiescent form of the disease escapes the notice of the examiner, who never looks for granulations, but only for the more noticeable phenomena of ordinary gonorrhœa and syphilis. Hence, a large portion of the prostitutes, who weekly receive their certificate of health, are really diseased, and become chronic centres of contagion, as many a verdant Englishman and American has found out to his cost, who, trusting to the fancied security of the governmental inspections, has indulged in Parisian licentiousness.

I stated above that granulur urethretis has scarcely any tendency to spontaneous cure. I have seen cases of 20 years' standing which were still in full activity. There is, however, at length, a sort of natural termination, which is reached by some patients in a few years, but by others not in a lifetime. The tendency of the granular disease is to gradually infiltrate the mucous membrane with permanently organized plastic lymph. This, like all other new tissue, undergoes contraction, which gradually compresses the contained bloodvessels, and at length obliterates them to such an extent as to atrophy and destroy the granulations themselves. The mucous membrane is now found to be paler than is natural, and to be hard and gristly, like the tissue of a cicatrix. The contractile tendency here is doubtless the same which we see in granulation of the eyelids, where it produces similar results; and, in addition, by

diminishing the area of the conjunctive, draws in the edges of the lids until the ciliæ rub on the eye. Hence why entropium so often follows granular conjunctivitis. A perfectly analogous phenomenon is observed in granular urethritis. In every case, according to Desormeaux, there is present some contraction of the calibre of the urethra, which, even when slight, may be detected by a practised hand in introducing a sound, and in more aggravated cases constitutes stricture. Hence, the opinion that this trouble is usually due either to the acuteness of the first inflammation, or to the injudicious use of nitrate of silver by the surgeon, must be considered erroneous. Granular urethretis tends towards stricture in all cases, though the narrowing is not always great enough to trouble the patient in urination. The same contraction, when it is considerable in amount, shortens the urethra so much as to be an obstacle to erection, constituting the chronic form of chordee.

The granular disease, situated in the cervix uteri, is probably the cause of the well-known barrenness of strumpets, and of women whose husbands have been of loose habits. In the latter case, the woman produces perhaps one or two children, but by this time gets from her husband a granular metritis, which obstructs the os uteri, and effectually prevents further conceptions. It is in this way that licentiousness operates to restrict the growth of population, and correspondingly diminishes the progress and power of nations.

In conclusion, I would state, that I think the endoscope is a valuable addition to our resources in urethral diseases; but that examinations, by means of it, into the interior of the bladder, the cavities of tumors, and the tracks of fistulas, will be found rather matters of curiosity than of usefulness. I think, also, that in consequence of the dimming of the reflectors, by time and other deteriorations, it will only be satisfactory in ordinary hands when used with the addition of the magnesian light.

ARTICLE XXIX.

MODERN HOMŒOPATHY.

COMMUNICATED.

From the *London Monthly Homœopathic Review*, for June, 1868, we learn that Lord Ebury gave vent to a feeling of regret that the Report of the London Homœopathic Hospital did not contain evidence of a greater development of the objects of the Institution. The number of patients was not very large, and the clinical lectures had been given up, "owing to the attendance being so scanty as greatly to discourage the lecturers."

We also find that the fourth object of the founders of the Hospital was, not is, "to let inquirers see of what homœopathic treatment consists, and *wherein it differs from other methods of cure.*" But the position is now assumed, that "when a physician adopts homœopathy he does not bind himself to use medicines on no other principle. His first and chiefest obligation is to the patient." His second duty only is due to homœopathy, for he must do the best within his knowledge for the promotion of his patients' recovery or relief. "When a case, or part of a case, is without the sphere of the homœopathic law; in other cases where his knowledge of the practice fails him; and, again, where a suitable palliative appears to be demanded, he is bound to use other than homœopathic means. This is always required in private practice," and is carried out in the London Homœopathic Hospital, although "a plan of treatment partly homœopathic and partly something else; one, in which one patient is treated in accordance with the law of similars, and another only partially so"—will fail in securing no less than four out of the five objects, to achieve which the Hospital was founded, *viz.:* to obtain statistics by which the success of homœopathic treatment *may* be compared with other methods of cure; to demonstrate the success of pure homœopathic treatment; to teach the system in all its purity, etc., etc. All these great objects are subservient to the interests of the sick, for the editor says:—

"We all know and admit that there are cases in which the most conscientious and painstaking (homœopathic) practitioners feel compelled to fall back upon auxiliary (allopathic) aids to eke out a modicum of relief, or indeed to assist in curing."

Accordingly, in the London Homœopathic Hospital, in which the cases "are not of so serious a character as one is accustomed to see under treatment in hospital," black wash is applied to syphilitic sores, and $\frac{1}{2}$-grain doses of mercury given internally. Cases of glandular enlargement in the neck were treated with tincture of iodine, painted on externally. For cases of continued sleeplessness $\frac{1}{48}$ of a grain of acetate of morphia was given every 15 minutes.

The Hospital physicians repudiated, one and all, the fallacies and absurdities of Hahnemann about infinitesimal doses and dilutions. They quietly told an inquiring physician "that the doses were not a part of *their* system; that like cures like was all *their* creed;" although it is not a matter of general or partial belief that morphia keeps people awake; that iodine produces enlargement of the glands; and black wash produces syphilis.

These Hospital physicians, and many others, have at last returned to the use of the medicines of the rational school in appreciable quantities; and the editor says the treatment in the above cases "was far too like allopathy to be advisable in a homœopathic hospital," although, "so long as the doses of mercury did not induce mercurialism, our opponents cannot (or rather should not) complain." He also says, he would avoid painting a glandular enlargement in the neck with tincture of iodine publicly in a homœopathic hospital, although he might unhesitatingly do it in private practice. And formally admits: "As regards the giving of morphia for sleeplessness, however necessary it may have been considered by the medical attendant, it cannot be called homœopathic treatment."

The homœopathic editor trusts his readers will thoroughly understand that he has no wish to object to those methods of treatment *per se*, although unsuitable for a hospital called homœopathic.

We are hardly surprised to find that Dr. Yeldham, the principal physician of the London Homœopathic Hospital, in what is called an excellent speech, delivered at the annual meeting of the Institution, referred to the possible expediency of a middle school, which would embrace both homœopathy and allopathy; and Dr. Reith said he knew many homœopathists who are prepared for the coalition.

The editor of the *Homœopathic Review* "has not the slightest doubt that some such step (or surrender) would be fraught with incalculable advantage to practical medicine," and it remains for us to see in what it should consist. If Hahnemann was so utterly mistaken about the efficacy of his infinitesimal doses; if every observation which he made upon the sick was an error; if every supposed cure was simply a recovery, is it not only not possible, but probable, that much of his reasoning and theorizing about the law *similia similibus curantur* is also false? If the frank and practical homœopathists must make such large concessions about the dose, will they not also be soon obliged to make equally large concessions about the theory? If we can judge from the following prescriptions, some of the homœopathists can make every required concession:

Quin. sulph. gr. viij; ext. cannibas ind. gr. iv; ext. aconit. *rad.* gr. iv. Make 8 pills; 1 every 3 or 4 hours. F——r.

Hydrarg. sub. mur. gr. iij; mass hydrarg. gr. iij; aloes gr. iij; podophyllin gr. $\frac{1}{8}$. Make 4 pills; to be taken at once. F.

Potassæ sulphuret ℥j; aq. ℥iv. Solve. M——d.

Pulv. alum erstæ ℥iiss; tannin ℥iiss; tinct. myrrhæ ℥j. For a gargle. M——d.

Magnesiæ sulphat. ℥iij; tinct. cort. aurant. ℥xvj; acid. sulph. aromat. ℥ss. M.

Ferri persulphat. ℥j; adipis. ℥j. M.

The *Medical Gazette* says: "Hahnemann taught that one grain of sulphur well rubbed up with 100 grains of sugar of milk could be developed into a medicine of tremendous energy. Some of his disciples of the Billy Barlow kind have made great improvements upon the simple proceeding of Hahnemann, and found out that 2 grains of sulphur mixed with 126 grains of

conium, quinine, and morphine, are still more efficacious. See following prescription: Sulphur pura, gr. ij; ext. conii mac., dr. iss, or 90 grains; quiniæ sulph., sc. iss, or 30 grains; morph. sulph., gr. iij; podophyllin, gr. iij; *i.e.* 126 grains of conium, quinine, morphine, and podophyllin, to 2 grains of sulphur. Make 30 pills, each containing 3 grains of conium, 1 grain of quinine, $\frac{1}{10}$ grain of morphine, $\frac{1}{10}$ podophyllin, and $\frac{1}{15}$ grain of very pure sulphur, and give one or two several times a-day in all cases in which sulphur was formerly considered useful, namely, in dyspepsia, biliousness, psore, eruptions, constipation, etc."

The Clinique.

MEDICAL WARDS OF MERCY HOSPITAL, MAY 27TH, 28TH, AND JUNE 7TH.—CLINICS BY PROF. N. S. DAVIS.—TUBERCULOSIS, DELIRIUM TREMENS, ETC.—REPORTED BY W. A. BARSTOW.

The clinic hours on the 27th and 28th of May, were occupied in the examination of cases of pulmonary tuberculosis. After each member of the class had carefully examined with the stethoscope the cases presenting different stages of this destructive malady, and the physical signs had been considered, in connection with the symptoms and history of each case, the special diagnostic features of each were presented in such a manner as to indicate not only the *nature* of the disease, but its extent and stage of progress. We pass over these details, as less profitable to the readers of the EXAMINER, than to the class of students in the hospital wards.

In reference to the treatment of tuberculous cases, it was remarked, that special attention should be given to the stage of the disease and to the circumstances of each case. For, while there are a few leading indications common to all, there are secondary or special indications in each case, arising from the stage of the disease and the sanitary surroundings of the pa-

tient. To allay the morbid sensibility of the pulmonary tissue and to sustain the functions of digestion and nutrition, are indications common to all cases and in all stages of pulmonary tuberculosis. In addition to these, in the first stage it is of great importance to maintain the full capacity of the lungs for air, and to supply the blood with whatever constituents the circumstances of the patient may have rendered deficient. In the second stage, in addition to the general indications, constant vigilance is required to ward off the frequent supervention of pneumonic, bronchial, and pleuritic attacks of inflammation, which often result in the establishment of wasting hectic. In the third or suppurative stage, we have still the two leading indications mentioned, with the addition of such means as will lessen the suppurative process and prevent exhausting discharges, whether from the skin or bowels.

To sustain the functions of digestion and nutrition, regular disciplined muscular exercise in the open air, so directed as to give full expansion to the chest, is of primary and essential importance; and should be persisted in so long as the patient's strength and the absence of positive inflammation will permit. There can be no reliable substitute for this. The sleeping-room should also be of good size, dry, and well ventilated. The diet should be abundant, digestible, and nutritious, but free from mere nervous excitants or exhilarants. In the formative stage of the disease, these means alone, judiciously and perseveringly used, will often arrest its progress, and restore the patient. But if more or less cough and morbid sensitiveness of the pulmonary organs are present, it will be better to direct, in addition, the use of one of the following formulæ:

℞. Comp. Syrup of Hypophosphites,------- ℥iv.
Sulph. Morph.,---------- 2 grs.

Mix. Take a teaspoonful before each meal; or,

℞. Sub-Nit. Bismuth,---------- ℥iij.
Sub-Carb. Ferri,---------- ℥ij.
Sulph. Morph.,---------- 3 grs.

Mix, divide into 30 powders, and take one before breakfast, dinner, and at bedtime.

If there be much diminution in the capacity of the lungs for air, as indicated by shortness of the inspiratory act, a tablespoonful of the following solution may be taken after each meal with much advantage, *viz.:*

℞. Chlorate Potassa,---------- ℥ij.
Pulv. G. Arabic,---------- ℥ij.
Aqua, ---------- ℥vj.
Mix.

When the second stage comes, characterized, as it usually is, by pains in the chest, greater severity of cough, feverishness, and other symptoms of an inflammatory nature, the following expectorant and alterative solution has been found more beneficial than any other:

℞. Muriat. Ammoniæ,---------- ℥iij.
Tart. Ant. et Pot.,---------- 2 grs.
Sulph. Morph.,---------- 3 grs.
Syrup Glycyrrhiza,---------- ℥iv.
Mix. Take a teaspoonful every four or six hours, according to the severity of the cough and soreness.

When the third or suppurative stage is fully established, and the patient expectorates purulent or muco-purulent matter freely with commencing sweats at night, all sedatives or nauseating expectorants should be discontinued, and such tonics as promote digestion and lessen the suppurative process should be given in their place. The powder of bismuth, iron, and morphine, already given, constitutes one of the best combinations that can be used at this stage. There are now in the Hospital wards three cases in which the cough, night sweats, and expectoration have been almost stopped by these powders, while the appetite and strength have decidedly improved. Another combination, which the lecturer has long used in this stage of phthisis, consists of:

℞. Glycerine,---------- ℥iij.
Syrup Iodide Iron,---------- ℥j.
Sulph. Morph.,---------- 2 grs.
Mix. Give a teaspoonful three or four times a day.

Occasionally, cases are met with in the advanced stage, in

which the tubercular disease is complicated by chronic bronchitis of such grade that it greatly increases the dyspnœa and the quantity of expectoration. A strongly-marked case of this kind was presented to the class, in Ward No. 9, not long since. In such cases, the following formula has often afforded great relief to the patient:

℞. Bal. Copiaba,---------- ℥iij.
Chloroform,---------- ℥iij.
Syrup Tolu,---------- ℥iv.
Pulv. G. Arabic,----------
White Sugar,---------- āā ℥iij.
Rub together, and add,
Camph. Tinct. Opii,---------- ℥ij.
Mint Water,---------- ℥ij.

Mix. Take a teaspoonful before each meal and at bedtime.

It was remarked that, in the treatment of phthisis, while the constant aim should be to give the patient plenty of pure, dry air, judicious muscular exercise, and nutritious food, much good judgment is required in selecting such remedies, from time to time, as are adapted to the various stages and complications of each case. Cod-liver oil will be found useful in all stages of the disease, provided the patient can take it without nausea or unpleasant effects upon the stomach. But the fashionable routine of treating all cases of phthisis with cod-liver oil, Bourbon whiskey, and all the rich food they can stuff down, cannot be too strongly condemned.

Delirium Tremens.—At the clinic of June 17th, a patient, laboring under this disease, was presented to the class; and, after calling attention to the characteristic symptoms, and the history of the case, the lecturer stated, briefly, his views of the nature and treatment of the disease. He said it was a popular belief, sustained, in part at least, by medical opinion, that the immediate cause of delirium tremens was the withdrawal of an accustomed stimulant, generally of the alcoholic class. But his own observation, extending over 30 years, had certainly shown that two-thirds of all the cases he had seen came on while the patients were still directly under the influence of

these drinks, and, hence, could not be attributed to their sudden withdrawal. He believed the essential pathological condition to consist of defective nutrition, with morbid excitability of the brain-substance.

The close observer will find that so long as a drinking man or woman continues to eat regularly and digest the food taken, no symptoms of delirium occur. But when the drinking destroys the appetite, and the patient takes no food, or, if he takes it, rejects it by vomiting, in from one to three weeks his blood and tissues reach that actual impoverishment of the nutritive atoms, that, coupled with the direct irritative effects of the alcohol, tremulousness, morbid vigilance, and delirium supervene, to a greater or less extent, whether the alcoholic drink be continued or omitted. In the case here before us, the patient had not eaten a meal for 15 days, but had continued to drink liquor up to the hour of his admission into the Hospital in a state of excited delirium.

Inasmuch as the alcohol undergoes no digestion or assimilation in the human system, but circulates through it as a foreign substance, and is ultimately expelled through the organs of excretion, it adds nothing to the nutrition of the tissues. Its presence retards atomic changes, and, thereby, retains effete material, especially of the carbonaceous class, which ought to have been eliminated. Hence, under its influence, if the ingestion of food is suspended, the blood and tissues not only become impoverished of nutritive atoms, but they become surcharged with an excess of retained effete material which adds to the general functional derangements.

Treatment.—In the management of cases of delirium tremens, there are two well-defined objects to be accomplished, namely: to allay the morbid excitability of the nerve-tissues, so far as to procure rest; and to restore digestion and nutrition. Individual cases will present minor additional indications, from gastric and other complications, which the practitioner must meet as they arise. In the great majority of cases, the best remedy to allay the morbid excitability and mental hallucinations, so far as to induce sleep, is the bromide of potassa or

the bromide of ammonium, given in from 10 grs. to 20 grs. at a dose, and repeated every two hours until the required rest is obtained. In bad cases, from $\frac{1}{3}$ to $\frac{1}{2}$ gr. of sulphate of morphia may be given each evening for the first two or three days of the treatment. The patient before the class has taken 15 grs. of the bromide of potassa every two hours during the first 36 hours, and the same dose every three and four hours from that to the present time (three days). Half a grain of morphia was given each day for the first two days.

Since the first night after the patient entered the Hospital, the delirium has been fully controlled, and convalescence is now established. Nourishment has been carefully given; first, bland and liquid, in small quantities, such as milk and meat-broths, in doses of one to three tablespoonfuls every hour, except while asleep. Subsequently, any plain food may be given at ordinary mealtimes. For many years, the lecturer has used no alcoholic drinks in the treatment of delirium tremens.

Correspondence.

AN EVENING AT THE MEETING OF THE LONDON PATHOLOGICAL SOCIETY.

The London Pathological Society numbers among its membership many of the most valuable men in the medical profession in that city. Many in attendance upon its meetings are gray-haired and venerable, but the larger number are yet young men, who have risen by industry and talent to positions where they have abundant opportunities to pursue the study of pathology under the most favorable circumstances. Holding appointments as house-physicians and surgeons in the various hospitals, they are constantly coming upon cases whose histories, with verifications by autopsy, render them of intense interest to the profession. The aggregate of these labors furnishes abundant material to occupy the members at the stated meet-

ings of the Society, and the only trouble is to find time to do justice to the cases presented. Men learn there the necessity of condensation in the statement of cases and the presentation of opinions; and the way the members manifest their desire to terminate a voluble harangue is so decided, that the bravest cannot long resist the pressure. A statement is always in the hands of the President, of just what is to be presented at that meeting; and the moment a case is called, the person having it in hand steps forward and claims attention. If brief, terse, and lucid, the more is he acceptable; if it has special merit, it receives most careful hearing; if trivial or trite, it is not wise for a young man to weary their patience long. So, too, the pet theories of old men are frequently cut short in the midst of their expression by the merciless *little bell.* If their presence is secured it is for a purpose, and there must be no abuse.

The effect is good every way. If a man has nothing worth saying, he soon learns to keep still; if his subject has merit, he strives to set it forth in brief, but enjoying, manner; and so, in a single evening, matters are brought under consideration and referred for publication in their Transactions, which a physician in private practice might only reach during long years of patient observation.

The regular sessions of the Society occur every two weeks. They are held in the rooms owned by the Medico-Chirurgical Society, from which they are rented for use upon these evenings. The London Obstetrical Society make use of the same rooms on other evenings in the same way. The rooms impress one as the theatre of action, where many of the best men that have lived, and most talented, have labored for the amelioration of misery; for the benefit of the race. The living are there in all the vigor of manhood; the memories of the dead are there also. The room in which the sessions are held is about 40 feet square, with high walls, covered on every side by cases of books. The lighting by day is accomplished entirely from the ceiling. On every side among the cases, on brackets, are placed marble busts, in memory of the venerable dead who once were members and officers of these societies. I made note of some of these,

and of the years when they were presidents of the Medico-Chirurgical Society. I give a few of them as they were noted, but not in the order of their election. The likenesses are said, in most instances, to be very striking, and I could but think that our British brethren would do the world a favor if they would cause these busts to be photographed, that the profession in every land, who have admired these men while living, might now the better perpetuate their memories, by placing side by side their works and likenesses.

Among these, where all are chief, are the names of John Abernethy, President of the Society in 1823; of Benjamin Travers, in 1827; of William Laurence, in 1831; of Sir Astley Cooper, in 1819; of Sir Henry Halford, in 1810; of Gilbert Blain, in 1813; of William Babington, in 1817; of Thomas Addison, in 1849; of Sir Benj. Brodie, in 1839; of James M. Arnott, in 1847; of Sir Charles Locock, in 1857; of Cæsar H. Hawkins, in 1855; and other names, which space forbids me to write, to perpetuate the memory of whom receives the sanction of the world. But I must come to the meeting of the Society, which I attended on the 6th of May last.

The Society convened at 8 o'clock. Its President is John Simon, known to many Americans, and now holding the position as Chief of the Medical Department of the Privy Council, and having a general surveillance of epidemics, etc., as they occur in the kingdom, and giving direction as governmental attention is demanded in medical matters. I noticed that he attained the Astley Cooper prize in Guy's Hospital, in 1844, his subject being the "Thymus Gland." His preparations are carefully preserved in that museum, in accordance with the rules of the hospital. He makes a good presiding officer, and the utmost decorum was manifest. About 60 members were present, all very promptly in their seats, as though they came for a purpose and had business to transact. I give the minutes of some 20 of the 27 cases which had been enrolled in the order of their presentation. I am unable to give the names of the persons offering them.

First, Second, and Third, were specimens of morbid growths of the femur.

Fourth. Granular disease of the kidney. Capsule adherent; renal artery terminates in a cul-de-sac; weight 6 grains.

Fifth. Disease of the parietal bones, with specimens and history of the case. Skull thickened; brain covered with solidified lymph; patient sometimes violent in temper; no other disease manifest.

Sixth. Endocarditis. Specimen presented, case described; lymph shown on the tricuspid valves.

Seventh. Deformities of the chest—Pigeon-breast. Motion of heart discoverable through the thin walls at the fifth left costal interspace; alternates with recession of spaces on the right side.

Eighth. Perforation of chest—Pneumo-thorax.

Ninth. Four specimens of disease of the supra-renal capsule. The bronzing proportionate to the slowness, but not to the severity of the capsular disease.

Tenth. Multilocular ovarian tumor. Removed the previous day; description of its diagnosis and of operation; blood found in cysts; woman still living.

Eleventh. Tuberculated liver. Description of case; with remarks upon entozoa in the gall-bladder.

Twelfth. Follicular tumors upon parietal bone, with drawings. Semblance to malignant tumors; vascular; remarks on arrest of hemorrhage.

Thirteenth. Abdominal and thoracic aneurismal rupture, with description of sac. Difficulty of diagnosis in this case.

Fourteenth. Colloid cancer of stomach. Specimen presented; reasons for diagnosis. Referred to Cancer Committee.

Fifteenth. Ulceration of the larynx, with obstruction of the œsophagus.

Sixteenth. Epithelial cancer of the œsophagus and lung. Interest from deposit in the lung.

Seventeenth. Microscopic specimens, delineating inflammation of the mesentery of the frog. Stages of inflammation and the appearance of corpuscles; passage of white corpuscles through the veins; passage of a red corpuscle through thick vessel wall. Here occurred a lively discussion on the passage of corpuscles.

Eighteenth. Fracture of femur. Injury of vessels; gangrene following.

Nineteenth. Case of swallowing of date-stones, with strangulation of hernia, and passages of these from artificial opening in one month; gradual closure of intestinal opening.

Twentieth. Case of curious deposit in the lungs, liver, and kidneys.

These, with seven cases additional, were passed in rapid review, only those points which were unusual being seized upon and discussed briefly, as the cases suggested them. The meeting adjourned at *10 o'clock*, when a cold collation was served, according to custom, in the front parlor, or reception-room; the audience-room being on the first floor also, and in the rear of the former. An informal and spirited discussion was held among a few of the members after adjournment, having reference to the subjects presented with case *Seventeen.*

Prof. Lionel Beale, to whose courtesy and invitation I was indebted for the pleasure of attendance at the meeting, entered heartily into the discussion, as to the precise seat of the formation of pus corpuscles. His views, as given in his work on the growth of tissues, are being received with great favor, so far as I can judge, by those who have given them candid and careful study.

Such extended opportunities for study as these united efforts afford, are of untold value; and they account, in part, for the attainments of those men who have had to do very largely in shaping the medical literature and opinions of the world.

America, young in everything else, is yet in the infancy of such labors; but the facilities for improvement are more and more at hand, as our cities increase and our hospitals multiply. We may confidently anticipate that, as all eyes are now turned to a much more thorough and improved system of medical education, societies for medical improvement will also be multiplied, and that these, being wisely conducted, will enlist the best energies and talents of the profession, and secure for us an honorable position and a just respect by all who appreciate the value of medical attainment, both at home and in other lands.

The labors of the London Pathological Society are well worthy of emulation. It is in the power of our Chicago physicians and surgeons to institute a favorable comparison of efforts if they will. J. H. H.

HASTINGS, Minn., June 12, 1868.

PROFESSOR DAVIS,

Dear Sir:—At the meeting of the Morgan County Medical Society, in February last, in your State, the case of placenta prævia reported, led Dr. Prince to say that "he believed in this presentation, the profession would eventually adopt the maxim, 'the most speedy delivery possible.'"

With the highest respect for Dr. Prince, as a practitioner and a writer, I feel strongly impressed with the duty I owe to my fellow-beings, to give "mine opinion" and show a better way. Speedy delivery has two important objections: it is exceedingly dangerous, and in my opinion unnecessary. To many this will appear paradoxical; but it is, nevertheless, perfectly true. I am satisfied that a general resort to speedy delivery, as a main dependence, will result in the death of many women. My preceptor, in the State of New York, lost two cases, by that practice, out of three. My first was saved by that practice, but required very assiduous nursing and stimulating for many hours. Last fall we had two cases in this city, to both of which I was called in counsel. One was "delivered speedily" by another physician, of the most consummate skill, and proved fatal in half an hour. In the other case, we loosened the placenta and waited, and she delivered herself in three hours with entire safety—the hemorrhage ceasing upon the detachment of the placenta, and she gradually reviving from the state of depression to which she had been brought by the hemorrhage.

I think the article on this subject in Professor Simpson's Works, Vol. I., p. 599, one of the most complete pieces of good reasoning that I have ever seen; and that it should be in the hands of every practitioner of midwifery. I am an entire convert to his doctrine, and believe that his practice will save

almost every case. An anxious study of this subject, and a practice of forty years, have led me firmly to this conclusion,

It would be quite improper to lengthen this paper, by attempting to give even a synopsis of Prof. Simpson's statements and arguments on this subject. I greatly hope that many of the readers of the EXAMINER will be led to possess themselves of a copy of his obstetrical works, and read it for themselves.

One of his positions is, that complete detachment of the placenta stops the hemorrhage which partial detachment produces. This looks inconsistent. To judge correctly of it, we must read his article and weigh his reasoning and facts.

He says the uterine vessels collapse as far as detachment takes place; and that the hemorrhage connected with partial detachment is through the placenta, and not directly from the uterine vessels. This I believe to be so.

To deliver a woman exhausted with hemorrhage, whilst we leave her still to bleed through a partially detached placenta, is one of the most dangerous operations that we can possibly subject her to. Is it not like amputating a thigh without a tourniquet? Or, after an accident, before reaction? It looks to me very much like these. Let me warn my brethren of the profession, therefore, how they proceed to "the most speedy possible delivery" in cases of placenta prævia, for it is often fraught with the most awful danger!

Save the blood of your patient with the tampon, cold, and rest, till you find delivery necessary. Then loosen the placenta, and wait for her to revive if depressed, and deliver herself if she can. If not, after reaction has taken place, so as to render it safe, deliver, and never before. The danger is from loss of blood. That, by detachment, is under our control. Immediate delivery can be but seldom necessary. It should not be resorted to to stop hemorrhage. If it be, it will often be followed by speedy death.

Mr. Editor, please excuse my plainness of speech, and assure my brethren of the continued esteem of an old man in the profession.

Respectfully yours,

F. B. ETHERIDGE.

Selections.

A NEW AND EFFECTIVE METHOD OF TREATING PHTHISIS PULMONALIS.

Dr. Carl Both, Boston, Mass., has written a monograph, in which he pronounces the curability of consumption with the greatest confidence, through *artificial calcification*. It is a practical application of the cellular pathology, announced by Virchow; and the author's theories may be given in his own words:

"As a nation consists of millions of single individuals, each holding a superior or inferior position, each dying and being replaced without injury to the whole, so is our body a commonwealth of cells, each of which has its office; each may die and become replaced by another. As a statesman watches over each individual, and tries to improve each for the benefit of the whole, so the physician should know all cells of the body, their office, and their place. He should cause their removal in case of unfitness or decay, and prevent such cells as do not fit its general structure from entering the body."

The cells composing our body live and are sustained by the food we eat, and if we cut off our food, we cut off the nourishment of the cells. By giving different food, different effects on the cells are produced. The blood requires lime for calcifying displaced or degenerated cells by depositing that substance in them.

He wishes to be understood, *that tubercles in the lungs are composed of, and originate from, blood-globules which have escaped out of the general circulation, through the bursting of an obstructed capillary vessel. That this obstruction takes place where the respiration is suppressed.* From this the conclusion is drawn *that tubercles can nowhere originate in the lungs, except in those parts where respiration has been oppressed or has ceased.*

The natural healing process consists in the calcification of the diseased parts, so that they appear as if made of chalk, though the original cells and tissues can yet be detected by the microscope. It is evident, therefore, that in such cases, the blood must have been able to furnish a considerable quantity of lime, to provide for the calcification of the decayed parts. His treatment is divided into three sections, each of which finally support the other in their effects:—

1*st.*—The *extension and cleansing of the lung by pressing air into it.*

2*d.*—The *introduction of lime into the blood* in sufficient quantity for the calcification of the tubercles; and the *purification of the blood by higher oxidation.*

3*d.*—The *determination and regulation* of a diet to suit the particular form and degree of disease.

The direct treatment of the lungs consists in pressing the air into them by natural inspiration, powerfully stimulated by certain muscular exercises which are calculated to effect this object. If, in the case of a collapsed lung and chest, the pressure of air in the lungs is increased, that organ and the thorax will necessarily be extended; and the air will pass gently and gradually into the smallest bronchi. The air vesicles and obstructed bronchi being opened, the pus and mucus contained in them will be expelled by the increased ciliary motion, by the revolving air, and by the action of the cough. At the same time the capillary circulation will be increased, diosmosis of the cells renewed, and many of them rescued from fatty degeneration and decay.

To increase the nervous action of the lung, and to produce at the same time an increased pressure, tension of the respiratory muscles must be resorted to, as a pumping force on one side, and as an irritant on the respiartory nerves by reflex irritation on the other.

To demonstrate the result, the following practice will be found of service: Let a person rest the whole of his weight on the ends of his toes and fingers in a horizontal position. He will find, on rising, that he must take larger and more forcible inspirations than were otherwise possible. By means of the forced inspiration effected in this way, air is driven into the diseased part of the lungs, and distends them in consequence.

The treatment of the blood consists, *first*, in purifying it from those substances which cause the profuse perspiration. The food is divided into two classes—respiratory and plastic. The first is that which contains no nitrogen. The second is that which does contain nitrogen, and which replaces the materials consumed by the action of the body.

The treatment of the blood consists, *second*, in the introduction of *phosphorus* and *sulphur.*

Having provided for the introduction of sulphur and phosphorus into the blood, we are, *third*, to obtain a sufficiency of *lime*, *silica*, and *magnesia.*

These materials are abundantly found in the hulls of oats,

barley, wheat, and rye; but in the early stages of the treatment these cannot be readily digested. Extracts of herbs and plants, known to be rich in these three substances, such as *Triticum repens*, *Achillea Millefolia*, *Marrubium vulgare*, *Leontodon taraxacum*, *&c.*, serve as a proper substitute. The general rule for the administration of food, in every case, should be the following: to *adjust the quantity given to the amount of oxygen to be absorbed.* For *respiratory* food, make use of whey, freshly made of boiled milk, from which the caseine has been separated by adding a little cream of tartar; malt sugar, honey, fresh butter; in the spring and summer, milk, after it has become thick by the formation of lactic acid. For *plastic* food, give Liebig's extract of meat, when the digestion is very bad! Raw meat, chopped fine, given in the form of a salad, is excellent. When the digestion is good, beef, mutton, game, and fresh fish, are the best articles of food.

The bread should be made of rye meal and corn flour (not sifted too finely). Sago, cracked wheat, farina, rice, corn and oatmeal, tomatoes, and all kinds of fresh and acid fruits, may be given as the case requires it.

A detailed statement is added of the history and treatment of twenty-one patients, between the ages of nineteen and forty-seven, who have been benefited, or entirely cured; with the exception of those who had diseases of the bowels. The author believes that by following the metho l described, every tubercular affection of the lung can be arrested without fail—only there must not be large open caverns.

Book Notices.

The Indigestions; or the Diseases of the Digestive Organs Functionally Treated. By Thomas King Chambers, Honorary Physician to H.R.H., the Prince of Wales; Consulting Physician and Lecturer on the Practice of Medicine in St. Mary's Hospital; etc., etc., etc. Second American, from the Second and Revised London, Edition. Philadelphia: Henry C. Lea. 1868. For sale by W. B. Keen & Co., Chicago.

This volume contains nine chapters, on the following sub-

jects: 1. Introduction; 2. Indigestion of various kinds; Habits of Social Life Leading to Indigestion; 4. Abdominal Pains; 5. Urinating; 6. Flatulence; 7. Diarrhœa; 8. Constipation and Costiveness; 9. Nervous Disorders connected with Indigestion. The writings of Dr. Chambers are too well known to need any commendation from us.

The Neuroses of the Skin: Their Pathology and Treatment. By Howard F. Damon, A.M., M.D., Fellow of the Massachusetts Medical Society, etc., etc., etc. Philadelphia: J. B. Lippincott & Co. 1868. For sale by S. C. Griggs & Co., Chicago. Price $2.00.

This is an elegantly published monograph, of 114 pages; on a class of diseases obscure in pathology, and often obstinate in their continuance. Under the head of neuroses of the skin, the author treats of hyperæsthesia, dermatalgia, prurigo, urticaria, zoster, and anæsthesia. Several illustrative cases are given at the close of the volume. It will be found worthy of a careful perusal.

Materia Medica, for the Use of Students. By John B. Biddle, M.D., Prof. of Materia Medica and General Therapeutics in Jefferson Medical College, etc., etc. Third Edition, with Illustrations. Philadelphia: Lindsay & Blakiston. 1868. Pp. 384. Price $4.00. For sale by W. B. Keen & Co., 148 Lake Street.

In this edition of his text-book on Materia Medica, the author has introduced quite a number of articles and topics omitted in the previous editions. Among them, are the several new anæsthetics, the sulphites and hyposulphites, the methods of hypodermic injections, and the atomizing of liquids. The work is increased both in size and value.

Circular No. 1. War Department, Surgeon-General's Office, Washington, June 10th, 1868. Report on Epidemic Cholera and Yellow Fever in the U.S. Army, during 1867.

This is a folio volume, or report, of 156 pages, containing

observations and statistics of great value, on the subjects of cholera and yellow fever.

Lessons on Physical Diagnosis. By ALFRED L. LOOMIS, M.D., Prof. Institutes and Practice of Medicine in the Med. Dep't of University of New York, and Physician to Bellevue and Charity Hospitals. New York: ROB'T M. DEWITT Publisher, No. 11 Frankfort Street.

This is a well-published volume, of 159 pages. It is a brief, but excellent treatise on the methods of physical exploration in the diagnosis of diseases.

Atlas of Venereal Diseases, by A. CULLERIER, Surgeon to the Hospital Du Mida, etc., etc. Translated from the French, with notes and additions, by FREEMAN J. BUMSTEAD, M.D., Prof. of Venereal Diseases in the College of Physicians and Surgeons, N.Y., etc. Published by HENRY C. LEE, Phil.

The translation contains the text of Cullerier's work, with brief comments by Prof. Bumstead. Its chief merit, however, is in its illustrations, there being in the whole work twenty-six colored lithographic plates, containing about one hundred and fifty beautiful figures of venereal diseases. It is issued in five numbers, at three dollars each, of which three are already out.

As was above stated, the plates constitute the chief merit of the work, being extremely beautiful, and numerous enough to make a good gallery of venereal diseases. Equal praise cannot be given to the text. Cullerier is a loose reasoner, and only passably good in pathological description, while his discussion of the therapeutical branch of the subject is quite imperfect. Prof. Bumstead would have been the right man to correct these deficiencies, but he has limited his notes for the most part to a few brief comments on points wherein he differs from his author. This brevity was probably adhered to, in order to avoid increasing the bulk and expense of the work too much.

In his general method and style Cullerier shows good sense, but no precision or acuteness. In respect to the nature of syphilis he is a "unicist," that is, he admits only one virus for

both the soft and the hard chancre, a position which may be considered as forever overthrown. The separate nature of soft and hard chancre, or, more properly speaking, of chancroid and true syphilis, is so intimately connected with the pathology and therapeutics of venereal diseases that one can by no means be a thoroughly reliable practitioner who does not understand the distinction between them.

In respect to gonorrhœa Cullivier commits the error of saying that the chronic form is not contagious, a most false and dangerous position to assume. The pathological connection between chronic gonorrhœa and granular urethritis, granular ophthalmia, and granular inflammation of the cervix uteri, has escaped his attention altogether. With characteristic French morality, he recommends those afflicted with chronic gonorrhœa to practice sextual intercourse, lest the erections caused by total abstinence from women should aggravate the inflammation.

Bumstead's notes have done much to correct the author's errors, but are not sufficient to rectify everything. As was remarked above, the merit of the work does not consist in its text, but in its superb colored plates, which, in fulness, beauty, and variety surpass anything previously published.

Klinik der Ohrenkrankheiten. Ein handbuch für Studirende und Aertze. Von Dr. S. Moos, Praktischer Artz und Docent au der Universität in Heidelberg. Wein. 1866. Wilhelm Brawmüller.

We have received from the publishers, through B. Westerman & Co., 440 Broadway, N. Y., this valuable hand-book of Dr. Moos upon diseases of the ear. The general, or first part, is devoted to the physical examination of the organs of hearing, embracing the outer, middle, and inner ear, and including a description of the various instruments made use of for this purpose. The value of Phinoscopy in the diagnosis of the diseases of the middle ear is fully recognized, and directions for the manipulation, taken chiefly from Semeleden, are given in detail.

In the chapter devoted to the examination of the inner ear, the theory of Helmholtz is discussed, and its value considered. The second, or special part, is devoted to the diseases of the ear. In the first six chapters, the author discusses the affections of the ear—embracing the inflammations, acute and chronic, circumscribed, diffused, of this portion of the organ. In the next eight chapters are considered the pathological changes in the tympanum, and the diseases of the middle ear. The remainder of the volume is devoted to the diseases of the nervous apparatus.

From the somewhat hasty examination which we have given to the work, we have no hesitation in recommending it to those of our readers who are interested in German medical literature. To the specialist in this department no recommendation of ours will be necessary.

Editorial.

Medical College Instruction.—Most, and perhaps all, the medical schools in our country have issued their announcements for the annual courses of instruction for 1868-9. With very few exceptions, they indicats a continuance of the same heterogeneous courses of instruction that have characterized our medical collegee ever since the colonial period of our country's history. The facilities for clinical teaching, in most of the schools, have been greatly increased during the last few years, and many of them have increased the number of their faculties and extended their lecture-terms to five months. But with only one exception, so far as we have observed, they still cling to the old, and often condemned, method of teaching all their students in one class, and subjecting them to the formal task of listening to lectures on all the departments of medical science and art in the space of four or five months. There is, however, one exception.

The Chicago Medical College, founded in 1859, and organ-

ized on the basis of systematic and progressive teaching, has this year completed its curriculum in accordance with the plan of its founders, and in full accordance with the recommendations of the Convention of Medical College Delegates, in Cincinnati, in 1867, and with the repeated recommendations of the American Medical Association. With a full corps of professors; with a complete curriculum, embracing every department of medical science and art, as it exists at this time; with the most ample facilities for hospital clinical instruction; and every means required for demonstrative teaching in all the departments, this college offers to the profession every facility for a systematic and complete medical education.

Having divided the whole number of branches taught into three groups, corresponding with each of the three years required for medical study, and extended the regular annual lecture-term to six months, the intelligent student can here enter upon the important work of acquiring a knowledge of medicine, in the same rational and systematic manner that he would in studying any other departments of science. Instead of crowding all into one class, those commencing study can limit their attention to such branches only as are adapted to their first year of pupilage, and thereby lay a proper foundation. Those in the middle part of their period of study can limit their attention to just the branches adapted to the second year; and the same with the third. Daily examinations in the lecture-room, and thorough examinations at the close of each annual course, complete the work of securing to the student both completeness of knowledge and thoroughness of mental discipline.

The Chicago Medical College thus presents to the profession a theoretical completeness of organization, but its actual practical advantages are equally perfect. In clinical advantages it has no superior in this or any other country. Mercy Hospital, founded in 1850, so far as medical and surgical attendance and clinical instruction are concerned, is as much a part of Chicago Medical College, as Bellevue Hospital is of Bellevue Hospital Medical College in New York. This hospital, with its medical, surgical, and lying-in departments, not only constitutes an ex-

cellent clinical school, but the classes in attendance are always so divided that each student is enabled to receive direct personal instruction in all the methods of examination and diagnosis. Cook County Hospital, always filled with a large number and variety of patients, is only five minutes' walk from the college building. It is supplied with an able corps of clinical teachers, among whom are Professors H. A. Johnson and Tho's Bevan, of the Chicago Medical College Faculty.

These two hospitals not only afford the most ample field for the clinical study of practical medicine, surgery, obstetrics, and morbid anatomy, but the wards for diseases of the eye and ear in the County Hospital, under the charge of Dr. J. S. Hildreth, afford full and thorough clinical instruction concerning the diseases and accidents of these important organs. Full personal instruction of the student in the use of the ophthalmoscope, laryngoscope, endoscope, microscope, and the various means of physical exploration and diagnosis, is included as a part of the ordinary courses of instruction by the members of the faculty, without extra charge. In all the schools of New York, Philadelphia, or Boston, if the student obtains direct personal instruction and practice in auscultation, ophthalmology, microscopy, etc., he must pay some professor or assistant an extra fee of from $15 to $30, for just what he receives fully in the regular course in the Chicago Medical College.

We are thus particular in calling attention to this college, not because we happen to hold a place in its faculty, but simply for the reason that the degree of patronage it receives from the profession of the North-west will have an important bearing on the success of the movement for a more extended and rational system of medical college instruction throughout the whole country.

For more than a-quarter of a century, the profession, through the National and State organizations, have been calling upon the colleges for the adoption of a system of instruction more adequate to the existing state of medical science, and better adapted to secure a thorough education of those who shall enter the ranks of the profession. These demands finally culminated

in the holding of a convention of delegates from medical colleges exclusively, in Cincinnati, in May, 1867. That convention, after full consideration, very unanimously recommended a revised system of medical college instruction, embracing a standard of preliminary education, six months' lecture-term, division of the various branches into three groups, and the requirement of three courses of lectures for graduation, etc. The plan received the immediate and unanimous approval of a full meeting of the American Medical Association, and, within the last few months, it has been equally sanctioned and its adoption urged upon the colleges by the State Medical Societies of Illinois, Missouri, Iowa, and others.

Chicago Medical College, complete in every department; commanding every facility for instruction that can be found in any part of our country; and pecuniarily free from all embarassment, present or prospective, has boldly and fully adopted the revised system recommended. If those enlightened members of the profession throughout the North-west, who have long desired to see our medical colleges substantially improved, will so direct their influence over students as to cause this school to be well sustained, it will speedily induce others to follow her example, and the long-desired change will become universal. Will each one recognize his personal responsibility in this matter?

Condensation.—The Senior Editor of the *Chicago Medical Journal* writes as follows, in reference to his new associate in the editorial work: "He will assume the task of *translations* of valuable papers from foreign medical journals, and in *each No.* furnish an epitome of *all* that attracts professional attention in the Old World."

Just what "*the task of translations*" may mean, we will not stop to inquire. But, inasmuch as "*each No.*" of the *Chicago Medical Journal* contains only 32 pages, and some of these are always devoted to the "*Apostle*," either the professional attention in the Old World must be very inactive, or the Associate-Editor will exhibit an extraordinary power of *epitomizing*.

Sickness of Pregnancy.—A writer in the *London Lancet* suggests belladonna, as probably the best remedy for allaying the reflex or sympathetic gastric disturbance of pregnancy. For several years we have used small doses of belladonna or atropine, before breakfast and dinner, for this purpose, with success. Sometimes, the relief has been more complete when each dose of the narcotic was associated with five or six drops of hydrochloric acid diluted with water.

A Contrast.—The Medical School of the University of Berlin has 401 students in attendance. Its corps of instructors consists of 14 ordinary professors, 12 extraordinary, and 24 private instructors. We have several medical schools in this country that claim an attendance of over 400 students, who receive all their instruction annually from 7 or 8 professors, and in the short space of 4 or 5 months. Either the faculty in Berlin must be very old fogyish, or some of our schools are little better than a farce.

Professors.—The Chair of Physiology in Jefferson Medical College, made vacant by the resignation of Prof. Robly Dunglison, has been filled by the appointment of J. Atkin Meigs, M.D., of Philadelphia. Tho's Bevan, M.D., Physician to Cook Co. Hospital, has been appointed to the Chair of Public Hygiene in Chicago Medical College. J. P. Ross, M.D., Physician to Cook County Hospital, has been appointed to the Chair of Diseases of the Chest in Rush Medical College.

Berkshire Medical College.—This institution, located at Pittsfield, Massachusetts, and for many years prosperous, has finally closed its doors, and will not probably be reöpened.

New Medical College.—An effort is being made to organize a new medical college in Detroit, Mich.

Michigan University.—It is understood that the Regents of the University of Michigan have abandoned the idea of mixing homœopathy into the medical department of the University.

The Monthly Medical Reprint.—This is a new monthly journal, published by John Hillyer, 14 South William Street, New York. Each number contains 64 closely-printed, double-column pages. It is entirely filled with the reprint "of the most valuable articles published in the latest issues" of the British medical periodicals. Price *five dollars* per annum.

The Half-Yearly Abstract of Medical Sciences.—The July No. of this labor-saving volume is promptly on our table, and contains its usual choice selection of foreign medical literature. Published by Henry C. Lea, Philadelphia.

University of Nashville.—During the past year, an effort seems to have been made to remove Professors Jennings, Eve, and Jones from their chairs in the Medical Department of the University. They denied the right of the rest of the Faculty to eject them, and appealed to the proper court. A decision has recently been rendered, sustaining their appeal, and enjoining the rest of the Faculty from interfering with them in the performance of their duties in the college.

Medical College of the State of South Carolina. Professors Chisolm and Miles have resigned from the chairs which they respectively filled. Professor R. A. Kinloch has been transferred from the chair of materia medica and therapeutics to that of surgery, made vacant by the resignation of Professor Chisolm. Dr. George E. Trescott has been elected professor of materia medica and therapeutics in the place of Professor Kinloch, transferred, and Dr. Middleton Michel has been elected professor of general anatomy and physiology, in the place of Professsor Miles.

Medical Department of University of Louisville.—Professors Henry Miller, H. M. Bullit, Lewellyn Powell, Lewis Rogers, and David W. Yandell have resigned their chairs in this Institution. The names of these gentlemen are entirely familiar to the medical public, and the arduous services rendered by most of them have been justly valued and fully appreciated.

The chairs made vacant have been filled by the election of Drs. Theodore S. Bell, John S. Crowe, L. P. Yandell, Jr., and E. R. Palmer, all of Louisville, Ky.

Mortality Report for the Month of June:—

CAUSES OF DEATH.

Accident, drowned,	4	Enteritis	1	Œdema glottitis	1
" railroad,	1	Encephalus, general	2	Old Age	1
" poisoned,	1	Erysipelas,	2	" and paralysis	2
Abscess, pelvic	1	Exhaustion & old age-	1	Paralysis	2
" hip-joint	1	Fever, puerperal	2	Peritonitis	1
Aneurism, rupture.	1	" scarlet	8	Pleurisy	1
Apoplexy	2	" typhoid	8	Pneumonia,	21
Asphyxia	1	" typhus	1	Pneumonia, broncho	2
Asthma	3	" pernicious	1	Pneumonia, typhoid	2
Birth, premature	15	Gangrene, seniles	1	Pneumonia, tuberculus	1
" still	32	" fol. amputation of thigh	1	Pneumonia, complicated with Measles	1
Bronchitis	2	Groin, carcinoma of	1	Phthisis pulmonalisis	22
" chronic	1	Hepatitis, chronic	1	Phthisis Mesenterica	1
Brain, congestion of	5	Heart, disease of	1	Scrofula, with fatty degeneration of liver	1
" disease of	1	" valvular disease	2	Spine, injury of	1
" inflammation	1	Hydrothorax,	2	Stomach, cancer of	2
Bright's disease	1	Hydrocephalus	1	" chronic derange.	1
Bowels, inflammation,	1	" acute	3	Suicide	4
Cancer	1	Inanition	5	Sunstroke	4
" of intestines	1	Intestines, ulceration-	1	Small-pox	9
" of tongue	1	Kidneys and Liver, organic disease of	1	" complicated with meningitis	1
Convulsions	38	Kidneys, disease of	1	Tabes mesenterica,	6
" puerperal,	3	Laryngitis	2	Tetanus traumaticus,	1
" fm teething	5	Liver, inflammation of	2	Tetanus	1
Cholera infantum	8	Lungs, congestion of	1	Teething	2
Chicken-pox, retroces.	1	Lungs, paralysis of	1	" and convulsions,	2
Croup	7	Measles	9	Throat, inflammation	1
" foll. whoop-cough	1	" complicated with pneumonia	1	Tumor, abdominal	1
Debility	8	" " bronchitis	1	Uterus, cancer of	3
" and old age,	1	Meningitis	1	Uterus, disease of	1
Diffuse inftm. cellular tissue	1	" cerebro-spinal,	2	Uterus, hemorrhage of	1
Delirium tremens	2	" tuberculosis,	2	Whooping-Cough	6
Diphtheria	1	Mouth, canker sore	2	Wounds, inflicted by parents,	1
Diarrhœa	13	Manslaughter,	1	Total	305
" chronic,	1	Nephritis	1		
Dropsy	2				
Dysentery,	3				

COMPARISON.

Deaths in June, 1868, 305 | Deaths in June, 1867, 283 | Increase, 22

Deaths in May, 1868, 321 | Decrease, 16

AGES.

Under 5	173	40 to 50	13	90 to 100	0
5 to 10	12	50 to 60	19	100 to 110	0
10 to 20	11	60 to 70	19	Unknown	2
20 to 30	21	70 to 80	8		
30 to 40	23	80 to 90	4	Total	305

Males, 173 | Females, 132 | Total, 305

Single, 222 | Married, 83 | Total, 305

White, 298 | Colored, 7 | Total, 305

NATIVITY.

Chicago	136	England	4	Scotland	2
Other parts U. S.	52	Germany	42	Sweden	14
Africa,	1	Holland	1	West Indies,	1
Bohemia	1	Ireland	33	Unknown	3
Canada	3	Norway	7		
Denmark	2	Poland	1	Total	305

DEATHS BY SMALL-POX.

For the Month of June, 1868.

3d Ward	2	14th Ward	1
7th Ward	0	Lake Hospital	3
12th Ward	1	Immigrant	1
13th Ward	2		
		Total,	10

MORTALITY BY WARDS FOR THE MONTH.

Ward.	Mortality.	Pop. in 1868.	One death in		Ward.	Mortality.	Pop. in 1868.	One death in	
1	2	11,499	5,749	1-2	14	14	14,168	1,012	
2	15	13,539	902	2-3	15	19	20,429	1,075	1-5
3	13	16,620	1,278	1-2	16	19	16,011	842	5-8
4	20	16,499	825		Unknown,	1			
5	16	13,434	839	2-3	County hosp.	7			
6	17	12,407	729	7-8	Chi. River,	1			
7	28	21,657	773	1-2	Alexian Bros.	1			
8	23	14,003	608	4-5	Conv't Sa. He.	1			
9	12	18,050	1,504	1-6	Soldier's hom.	1			
10	12	13,644	1,120	1-3	Marine hos.	1			
11	19	13,117	690	1-3	St. Luke's hos.	1			
12	11	14,739	1,340		Orphan asyl.	9	Immigrants,		23
13	15	11,113	740	6-7	Lake Hosp.,	3	Police Stat. 2d Pre.		1

Total, 305

MONEY RECEIPTS TO JULY 28TH.—Drs. John Charlton, $3; A. Chapman, 1.50; H. C. Hutchinson, 3; J. M. Steele, 3; S. D. Mercer, 3; J. Y. Campbell, 3; D. C. Stillions, 3; J. W. McAfee, 3.

ON THE NATURE OF VACCINE VIRUS.—The following is an abstract of a paper presented to the Académie des Sciences, by M. A. Chauveau, on the nature of vaccine virus, and the experimental determination of the elements forming the principle of virulent vaccinal serosity:

The virulent humor furnished by the virulent pustule is a complex product, analogous in its composition to all the non-specific pathological serosities. Neither chemical analysis, nor microscopical examinations, have revealed any special element to which the peculiar activity of vaccinia might be attributed. This activity necessarily exists in the common elements which take part in the formation of vaccinal serosity, and which, according to the opinion of Claude Bernard, have acquired a

virulent property through simple isomeric modification. But does this metamorphosis, which establishes the virulence, affect all the elements of vaccine? or, rather, does it act upon some one or some few of them; does the virulent activity require the concurrence of all these elements, or is one sufficient for its production? M. Chauveau has attempted to resolve these problems by isolating the principles which enter into the composition of vaccinal serosity, and subjecting each of them to the criterion of physiological experimentation: serum containing, together with albumen which forms the base, all the other soluble substances, was dealt with on the one hand, and on the other, the solid elements, that is to say, the leucocytes and the elementary granular bodies which are suspended in the serous fluid.

M. A. Chauveau derived the following results from his experiments: The leucocytes do not constitute the essential agents of the virulence. They may share in this property with the other elements of vaccinal fluid; but they do not possess it exclusively.

M. Chauveau succeeded in obtaining vaccinal serosity entirely free from all solid bodies, including the finest molecules. This was done by utilizing the phenomenon generally known as diffusion.

Whilst the inoculations of the perfect vaccine succeeded, that of the vaccine deprived of its solid matter always and most completely failed.

M. Chauveau, to give this fact its whole significance, states that "the purely serous liquid was always tested by heat, or nitric acid, at the time of its inoculation, and gave, in every instance, the reaction denoting the presence of albumen. Neither the absence of this fundamental element or of any others, nor their extreme dilution, can, therefore, be brought to explain the inactivity of the vaccinal serous fluid."

These experiments permit of the conclusion that the vaccinal serous fluid is not virulent, and that the activity of the vaccine exists in its solid bodies, either in all without distinction, or in one special portion of these small elementary organisms.

This inactivity of the vaccinal serous fluid, M. Chauveau states, constitutes a fact of great importance, not only with special regard to the theory of virulence, but also from the general point of view of the physiology of the elements.—*Half-Yearly Abstract.*

Thermometrical Observations in Typhoid Fever.—Dr.

Thomson's observations (published in *St. George's Hospital Reports*, vol. ii.) extend over a period of three years, and are made from a careful study of 47 cases. They tend to confirm Professor Wünderlich's researches on the same subject. In typhoid fever, a decrease of temperature is not always a favorable sign, nor is a rapid fall symptomatic only of a crisis. As a rule, the nocturnal increase of temperature in this form of fever is very considerable, and amounts to two or two and a-half degrees. During the latter half of the first week, the heat increases day by day, and varies between 102° and 103° in the morning, and 104° or even 105° in the evening. These high temperatures are quite sufficient to distinguish typhoid fever from tubercular meningitis, or from peritonitis, these diseases seldom showing much increase over 102° Fahr. During the second week, the temperature varies between 102° in the morning, and 103° and 104° in the evening, the oscillations being influenced by the amount of diarrhœa. The thermometer does not enable one to say, by a longer prediction than 24 or 48 hours, whether the case is likely to be fatal or not; but a steady rise in the temperature will often indicate the danger of ulceration of the bowels 24 hours before the intestinal lesion is manifested by diarrhœa and hemorrhage. The mode of termination of the fever is characterized by extraordinary oscillations in the temperature between morning and evening, the difference being sometimes as great as nine degrees. This feature distinguishes the thermograph of typhoid fever from that of almost all other diseases. In one case of perforation of the bowels, which was preceded by hemorrhage, the heat of the body was reduced from 102° to 99°.5, and was followed by a rise to 102°.2, where it remained for 48 hours before death, during which period perforation took place.

The conclusions that the observations made with the thermometer in cases of typhoid fever lead Dr. Thompson to draw, are the following:

1. The thermometer points out a distinction between typhoid fever and some other diseases which often simulate it, *viz.*, acute granular kidney, meningitis, peritonitis.

2. The thermograph of typhoid differs from that of other fevers, and especially in the mode of favorable termination.

3. An additional distinction between typhoid and typhus fevers is thus given.

4. It is possible, by its use, to appreciate intestinal lesions before they are recognized by the ordinary symptoms.—*Half-Yearly Abstract.*

Hemorrhage from Waxy or Amyloid Degeneration.—For some years past, Dr. G. T. Stewart, of the Royal Infirmary, Edinburgh, has noticed that hemorrhage from the stomach and intestine occurs in cases of waxy or amyloid degeneration, and that independently of ulceration of the mucous membrane. He has thus been led to look into the literature of the subject, and inquire among professional friends as to their observations.

The conclusions, which seem warrated by the facts he has observed in connection with this subject, are—

1. That hemorrhage is not a very infrequent consequence of the waxy or amyloid degeneration of vessels.
2. That, next to the spleen, the intestinal tract is the most common seat of such hemorrhage.
3. That the hemorrhage occurs independently of any visible ulcerative process.
4. That it probably depends upon rupture of the capillaries at the affected parts.
5. That waxy or amyloid degeneration of the liver does not of itself suffice to induce hemorrhage from the bowels.
6. That the hemorrhage occurs in cases in which the liver is free from waxy degeneration.
7. That the occurrence of hemorrhage increases the danger of the patient. But,
8. That sometimes it comes and goes for years without markedly depressing the vital powers.

In regard to treatment, Dr. Stewart adds, so far as he has yet seen, the diarrhœa and hemorrhage appear to be beter controlled by sedative and astringent enemata than by any other means.—*Ibid*

Alcoholic Rheumatism.—About 30 years since, John Higginbottom, Esq., F.R.S., Nottingham, first noticed that a form of (so-called) rheumatism was cured by abstaining for some time from the use of fermented alcoholic fluids. He said at that time that the complaint should not be called rheumatism, but alcoholism, as *alcohol* produced the disease, and abstinence from *alcohol* was the remedy. Mr. Higginbottom maintains that:—

1. Alcoholic rheumatism is the result of a distinct cause.
2. It is produced by drinking fermented alcoholic beverages.
3. It is slow in effecting a marked visible change in the system.
4. It does not usually appear before middle life.
5. Its effects are produced by the accumulation of the fermented alcoholic fluids taken into the system.

6. It causes stupidity, stiffness in the body, hobbling gait, and ultimate lameness.

7. It causes changes of structure, producing chronic alcoholism.

8. The remedy is abstinence from the use of all fermented alcoholic drinks, and taking vigorous exercise in the open air. —*Ibid.*

A Remarkable Case.—At the late session of the Massachusetts Medical Society, in Boston, Dr. John M. Harlow gave the history of a man named Gage, who, while blasting rocks at Cavendish, Vt., in 1847, had a tamping iron three feet seven inches long and one and a-quarter inch thick and tapering to a point, forced through his head, it entering the left cheek and coming out about the centre of the top of his head. Dr. Harlow, who attended the man, gave the daily symptoms of his patient and said that in 59 days he was able to walk and ride, and was soon nearly as well as before, although his intellect was somewhat affected. This is considered the most remarkable case of the recuperative powers of nature and has been doubted by many prominent surgeons. Gage died May 21, 1861, 12 years, 6 months and 8 days after the injury. Dr. Harlow procured his head and has presented the skull to the Warren museum of the Harvard Medical College. Dr. Bigelow said he saw Gage 20 years ago, and was then satisfied of the reality of this wonderful case. He also said, a tube of iron $\frac{5}{8}$ths of an inch in diameter and about five feet long passed through a miner's head, while blasting coal in Ohio, and was pulled out by a fellow-miner. The injured man was introduced to the audience, and Dr. Jewett, the attendant physician, recounted the case in detail.

Transfusion of Blood.—A German medical journal gives the account of a case of poisoning by exposure to the vapors of burning charcoal, in which transfusion of blood, from the arm of a robust man, effected a satisfactory cure, after every other effort at restoration had failed and the patient was believed to be dead.

Epistaxis and the Means of Arresting it.—Dr. John Thompson (British Medical Journal—Canada Medical Journal) recommends the following simple and, in his hands, very successful treatment, as a substitute for the ordinary method of plugging the nares. A strip of lint as broad as the finger and

twice the length of the nasal passage, is folded over the "bowl end" of an ordinary director and introduced along the floor of the nostril until it reaches the throat. The director is then withdrawn, "giving it a wriggling movement, so as leave the lint rumpled and loosely distending the passage. The result is, that the blood rapidly permeates and distends the lint, a large coagulum is formed and the bleeding completely arrested."—*Humboldt Medical Archives.*

BELLEVUE HOSPITAL MEDICAL COLLEGE,

CITY OF NEW YORK.

SESSION OF 1868-'69.

FACULTY.

ISAAC E. TAYLOR, M.D., Emeritus Prof. of Obstetrics and Diseases of Women and Children, and President of the College.

JAMES R. WOOD, M.D., LL.D., Emeritus Prof. of Surgery.

FRANK H. HAMILTON, M.D., Prof. of Practice of Surgery with Operations.

LEWIS A. SAYRE, M.D., Prof. of Orthopedic Surgery.

ALEXANDER B. MOTT, M.D., Prof. of Surgical Anatomy with Operations.

W. H. VAN BUREN, M.D., Prof. of Principles of Surgery with Diseases of the Genito-Urinary System.

BENJAMIN W. McCREADY, M.D., Prof. of Materia Medica and Therapeutics.

GEORGE T. ELLIOT, M.D., Prof. of Obstetrics and Diseases of Women and Children.

FORDYCE BARKER, M.D., Prof. of Obstetrics and Diseases of Women and Children.

STEPHEN SMITH, M.D., Prof. of Descriptive and Comparative Anatomy.

AUSTIN FLINT, M.D., Prof. of Principles and Practice of Medicine.

R. OGDEN DOREMUS, M.D., Prof. of Chemistry and Toxicology.

WILLIAM A. HAMMOND, M.D., Prof. of Diseases of the Mind and Nervous System.

AUSTIN FLINT, JR., M.D., Prof. of Physiology and Microscopy, and Secretary of the Faculty.

The Preliminary Term will open on Wednesday, September 16, 1868, and will continue until the opening of the Regular Session, October 14, 1868. A distinctive feature in the method of Instruction in this College is the union of Clinical and Didactic Teaching, and all the Lectures are given within the Hospital Grounds.

FEES FOR THE REGULAR SESSION.

Fees for Tickets to all the Lectures during the Preliminary and Regular Term, including Clinical Lectures,	$140 00
Matriculation Fee,	5 00
Demonstrator's Ticket (including material for dissection),	10 00
Graduation Fee,	30 00

For the Annual Circular and Catalogue, giving regulations for graduation and other information, address the Secretary of the College, Prof. AUSTIN FLINT, JR., Bellevue Hospital Medical College.

CHICAGO MEDICAL COLLEGE.

The regular Annual Lecture Term in this Institution will commence on the first Monday in October, and continue until the fourth Tuesday in March following. Clinical Lectures *daily* throughout the term.

FACULTY.

N. S. DAVIS, M.D., PRES'T OF FACULTY, 166 State Street,
Professor of Principles and Practice of Medicine and of Clinical Medicine.

W. H. BYFORD, M.D., TREAS. OF FACULTY, 62 State St.,
Professor of Obstetrics and Diseases of Women and Children.

EDMUND ANDREWS, M.D., SEC'Y OF FACULTY,
81 Monroe Street,
Professor of Principles and Practice of Surgery and of Military Surgery.

H. A. JOHNSON, M.D., 611 Wabash Avenue,
Professor of Diseases of Respiratory and Circulatory Organs.

C. GILBERT WHEELER, B.S.,
Professor of Organic Chemistry and Toxicology.

RALPH N. ISHAM, M.D., 47 Clark Street,
Professor of Surgical Anatomy and Operations of Surgery.

J. H. HOLLISTER, M.D., 30 Washington Street,
Professor of General Pathology and Pathological Anatomy.

THOMAS BEVAN, M.D., 81 Monroe Street,
Professor of Public Hygiene.

R. J. PATTERSON, M.D.,
Professor of Medical Jurisprudence.

J. S. JEWELL, M.D.,
Professor of Descriptive Anatomy.

DANIEL T. NELSON, M.D., 169 Dearborn Street,
Professor of Physiology and Histology.

M. O. HEYDOCK, M.D., 92 Dearborn Street,
Professor of Materia Medica and Therapeutics.

C. GILBERT WHEELER, B.S.,
Professor of Inorganic Chemistry.

E. O. F. ROLER, M.D., 62 State Street,
Adjunct Professor of Obstetrics.

J. M. WOODWORTH, M.D., Lombard Block,
Demonstrator of Anatomy.

S. A. McWILLIAMS, M.D., 166 State Street,
Assistant to Professor of Anatomy.

JULIEN S. SHERMAN, M.D.,
Curator of the Museum.

NORMAN BRIDGE, M.D.,
Assistant to the Demonstrator of Anatomy.

FEES.

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BOKHARA
THIBET
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TEHRAX
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COSSEIR
MEDINA
JAMBO
PERSIAN GULF
KURRACHEE
HALASORE
CUTTACK
JUGGERNAUT
LACHSA
TO MUSCAT
NAGPOOR
CANJAM
SURAT
MUSCAT
TO MUSCAT
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JIDDA
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THE

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Original Contributions.

ARTICLE XXX.

ON THE CONVEYANCE OF CHOLERA FROM INDIA THROUGH PERSIA, ARMENIA, AND GEORGIA, TO RUSSIA AND THE REST OF EUROPE.

By JOHN C. PETERS, M.D., of New York.

There is a great nursery of cholera in the northern part of Hindostan, at the foot of the Himalaya Mountains, *viz.*, at Hurdwar, where the thrice sacred Ganges emerges from the mountains, and from being a tiny stream becomes a river, and descends upon the land which it is to fertilize and bless. The largest of all the Hindoo festivals and fairs is held at Hurdwar every year, at the time of the vernal equinox, *viz.*, in April, when at least 200,000 or 300,000 pilgrims and merchants always assemble there. But every twelfth year, which is particularly holy, as many as 1,500,000 to 3,000,000 of devotees and traders are often crowded together. This festival is not only the focus for the produce of all Hindostan, from Calcutta in the south-east, and Bombay in the south-west, and all the intermediate cities and provinces; but merchants and pilgrims also hasten there from Arabia, Persia, Beloochistan, Afghanistan, Cabul, Independent Tartary, Central Asia, and Russia.

As a matter of course, cholera is often brought to Hurdwar; often originates there; and is frequently carried away from it,

not only down the Ganges, Jumna, and Indus rivers, but also up to the north and west, *viz.*, to Afghanistan and Cabul, and from thence to Persia and Independent Tartary and Russia. It leaves India in three directions. The principal line of travel is from Hurdwar to Lahore, from there to Attock and Peshawur, through the great Kyber Pass to the city of Cabul. The second is from Hurdwar to the city of MOULTAN, through the Bolan Pass to Kelat in Belochistan, and to Candahar in Afghanistan. A third stream of the disease is carried down the river Indus to Kurrachee and Bombay, and from there forwarded over to Arabia, and up the Persian Gulf and Red Sea.

In 1783, over 1,500,000 devotees assembled at Hurdwar, and in eight days over 20,000 of them died of cholera. Twelve years after, *viz.*, in 1795, the same thing occurred in a lesser degree; also in 1807. In 1867, *viz.*, 5 times 12, or 60 years afterwards, the *London Lancet* tells us 3,000,000 of Hindoos assembled at Hurdwar, and, in consequence, a very disastrous outbreak of cholera took place.

The cholera of 1827 destroyed 30,000 persons in Lahore, then passed north through Attock and Peshawur and reached Cabul, from whence it was distributed due west to Herat, Meschid, and Teheran, and reached Russia, at Astrakhan, in 1829 and 1830. From Cabul it also passed north, to Balk, Bokhara, and Khiva, and reached Orenburg, in Russia, in 1829.

The epidemic of 1841 began its second great emigration, after prevailing in a frightful manner along the rivers Ganges and Indus, reached Lahore, was carried to Cabul, and conveyed, by pilgrims, from Herat, in November, 1845, to the holy city of Meschid; from there it went to Teheran, in June, 1846, and prevailed so frightfully as to kill 9000 persons in four months. From Teheran it was again carried to Russia, in 1846 and 1847. From Cabul it was also carried to Balk, Bokhara, and Samarcand in 1845; and to Khiva and Orenburg in 1846.—DRASCHE.

The great pandemic of 1849 passed along the same routes, killing 15,000 persons in Teheran in 1851, and 11,000 more in 1852 and 1853. We have given these dates and figures solely

to prove the importance of attention to these great routes of cholera towards Europe from the north-west provinces of Hindostan.

CABUL is the first great town to the north-west over the borders of the British possessions in India. It is the grand centre of the trade of India with Persia, Central Asia, and Russia. It is the southern terminus of the Russian commerce with Hindostan, and has long been the theatre of the commercial and political rivalry of Russia and England, in their attempts to control Persia and Central Asia. Cholera is regularly brought up to Cabul from Hurdwar, through Lahore, Attock, and Peshawur, and, although it is called "the city of 100,000 gardens," parts of it are well adapted to multiply the infection of cholera. Many of its small streets are built over, forming low, dark tunnels, containing every offensive thing. Water collects and stagnates in ponds all over the city; the inhabitants cast out the refuse of their houses into the streets; and dead dogs and cats are frequently seen lying on heaps of the vilest filth, while dead horses occasionally pollute the air for many days together. —Sir ARTHUR CONNOLLY.

The traffic between Russia, Persia, Central Asia, and India, by way of Cabul, is made under curious conditions, which have descended from high antiquity; for it belongs to four tribes of Lohanee Afghans, called *Provindahs*, who are both pastoral and mercantile in their pursuits, and number 8000 families, with over 30,000 camels and 10,000 oxen of transport. They organize themselves into three immense caravans, which resemble veritable *corps d'armee*, and descend into India, not only in time to attend the great fair at Hurdwar, but also to penetrate down the Ganges to Benares, and along the Indus to Kurrachee, and thence by sea to Bombay. They bring down Russian, Persian, and Afghanistan articles of trade, and return with cotton goods, muslins, shawls, silks, brocades, and innumerable other articles. The first great division has 20,000 to 30,000 camels, numerous oxen, and 50,000 to 60,000 head of sheep; the second division, 10,000 to 17,000 camels and a proportionate number of oxen and sheep; and the third division, 3000 to

5000 camels. These all return to Cabul and Candahar by the middle of June, in time to dispatch their investments on to Herat and Meschid in the west, and to Balk and Bokhara in the north-west. They also always descend again into India by the end of October, with 36 different Russian articles, and return with 64 kinds of English and India goods. From 1500 to 2000 camels are alone employed in conveying pomegranate rinds, which dress leather in a superior manner; 3000 camels carry coarse cotton cloths from India to Cabul; five caravans with shawls, from the 16,000 looms in Cashmere, have arrived in Cabul in one year; much salt is carried up from the inexhaustible mines at Lahore; many thousand camel-loads of fresh and dried fruits are brought down to India; and Russian goods are so cheap and common in Cabul, at times, that looking-glasses, large enough to serve as window-panes, are sold for half a dollar. In addition, there is a great Hindoo festival on the banks of the Indus, near Attock, every April, to which great crowds congregate. Pilgrims also come down from Cabul to the river Indus, which they descend to the sea and then pass on to Mecca; and a great Mohammedan festival takes place on the 28th of March. Such are the causes which propel cholera up from India to Candahar and Cabul.—Sir ALEX. BURNES.

From Cabul, the disease is always carried due west to HERAT. Occasionally, it has happened that a single traveller or pilgrim could proceed, unarmed, from Cabul to Herat. But, generally, the merchants and devotees travel in great caravans, with long strings of camels. They are armed to the teeth, and often bear the marks of many a conflict. Now and then some prince, like the son of the King of Lucknow, comes up with a large suite of Indo-Mohammedans; and it is thought that over 60,000 pilgrims pass through Herat every year, on their way west to the holy city of Meschid.

Herat has at least 50,000 inhabitants, and is a well-known town; but in 1857, the *London Times* asked, "Where is Herat?" It is in the extreme north-western corner of Afghanistan, and stands in the same relation to this province that Peshawur does to India; for it is the only gate by which it can be approached

from the west. All the practicable roads from Persia and Central Asia converge and unite as they approach Herat. It is the door and citadel which must be opened before caravans and armies from Persia and the west can reach Afghanistan and Hindostan. Its situation is one of the greatest military and commercial importance; for the peaceful files of the caravan and the dread battalions of war must alike pass through it on their way from India to Persia, and from Persia to India. Long camel trains, coming up from Delhi, Moultan, Hurdwar, and Lahore, traverse it, bearing the products of India and the manufactures of England to the distant towns and oases of Persia and Turkistan. So completely is Herat a gateway of commerce, that it is called a "*bunder*," or port, although the only seas upon which it borders are seas of sand. The march of conquest has led through it from time immemorial, especially after the time of Mohammed. Since A.D. 710, host after host of fierce warriors, led by the Kaliphs of Damascus and Bagdad, of Syria and Western Persia, coming almost from the borders of the Caspian, Black, and Mediterranean Seas, have carried the tassels of the Mohammedan flag victoriously down into India. The vast and fertile plain about Herat has often been a huge *place d'armes*, where all the assembled columns from the west have united and recruited before making their final descent upon Hindostan, and it has often been predicted that the Cossack and the Sepoy must, sooner or later, meet there in deadly strife. No better camping-ground and quarters have ever been found for caravans and armies. Abundant crops of wheat and barley, and every kind of fruit known to Persia, grow there in profusion. Cattle and sheep abound. The bright waters of the river are as "clear as tears," and numerous running streams and artificial canals light up the pleasant landscape and fertilize the soil. Such is the profusion of roses, that it is called the "*City of Roses*," and a very large proportion of the whole world's supply of the celebrated "Attar" comes from it. But there are other smells than those from roses about Herat. At night, on the road, one is apt to be wakened by the shouts of drivers and the tinkling of bells, announcing a

passing caravan, and by the faint light of the moon perceives a sea of long, black boxes surging by on scores of mules and camels. Each animal is laden with two of these horrible objects, one on each side, and many of them are so loosely nailed together that another sense than that of smell soon convinces one that they are used as coffins. In fact, they contain the bodies of the devout, who, having died in the true faith, are now being taken to be buried in holy ground at Kerbela or Meschid. They are often carried hundreds of miles, and a sickening stench always comes up from their gaping fissures, causing nausea and faintness in the drowsy, unsuspecting traveler, who finds it impossible to extricate himself promptly from their neighborhood; for they come crowding on in the dark as if there were no limit to their numbers.

The cholera of 1828 swept away many thousands in Herat, although water, that prime necessity of Oriental life, is so abundant that almost every house has its fountain, besides the large public ones in the streets and bazaars. Each successive epidemic of the disease in Hindostan has reached Herat, and been carried on through Persia to Turkey and Russia. That of 1841, reached Cabul in June; Herat in August; Meschid in September; and Teheran in October.

The next important town due west of Herat is MESCHID. This is so holy that no person of any sect called Mohammedan has ever dared to commit the impiety of firing a hostile shot at its walls. For eight months in the year all the roads to and from Meschid are thronged with pilgrims. Nearly 60,000 come up from India, Cabul, and Afghanistan; and as many more from the south of Persia. Over 100,000 crowd on fanatically from Turkey in Asia and the Caucasus in the west; and perhaps an equal number from the north.

Connolly says, the distant cities in which the pilgrims assemble and make themselves up into caravans, to go to Meschid, are so thronged with men and animals, that there is scarcely passage through the crowd. Horses, mules, camels, and cattle are picketed the entire length of the outer walls, where they neigh, bray, and fight, while their masters are busy currying or shoeing

them; mending pack-saddles; higgling for supplies of straw or corn; or sleeping, praying, or reading the Koran.

The pilgrims generally travel at night; some of them carry torches, and at the head of the line a pot of live charcoal swings under the belly of a horse, to light their pipes and mark the line of march. In cool and pleasant weather they move by day. Gay pennons are then unfurled; and all go on with light hearts. From time to time, their leaders raise a shout for the blessed Mohammed, and if their followers do not join in loudly and unanimously, they are urged to do "better than that," "sweeter than that," angels are called upon to aid them, till, finally, the air is rent with fervent and inspiring cries, which makes one's very heart's blood boil. Going and returning pilgrims greet each other on the road. Many others are seen encamped at the road-side; the poorer pilgrims in miserable tents and shelters, but the richer Turks and Persians in green, sky-blue, or white tents, surmounted by gilt balls and crescents, and lined with costly carpets. Well-clad male and female servants, in numberless groups, walk, recline, sit, smoke, or chat in and about the camps. Hundreds of horses, richly caparisoned, graze around. Huge piles of baggage and provisions are guarded by trusty soldiers, bristling to their chins with silver-hilted daggers and inlaid pistols. The whole bearing an air of wealth, pomp, and security.

The scene is more wild and strange when the pilgrims halt at caravansaries. The noise and quarreling, at first, can only be imagined by those who have seen Persians on the march. But the leader of the caravan soon takes his place in the middle of the square, and commences reciting prayers and verses in honor of the Prophet, to which the pilgrims shout short sentences from the Koran in reply. Connolly says, the effect of their voices coming from the cells on all sides is very wild and pleasing, especially at night, when the sounds gradually rise, chiming in with each other till they are perfectly blended in one full chorus. But soon all fall asleep and silence reigns, in cells which are so filthy that few Europeans can remain in them.

Finally, the holy city is reached, and several times in the

course of every day dense troops of soiled and jaded pilgrims and travelers pass through the city gates of Meschid, into the great square, which is usually crowded with people from all parts of the East: with Afghans, Arabs, Koords, Turks, Osbegs; with pilgrims from all the provinces of Persia; with priests, merchants, peasants, and dervishes, without number, fromt he borders of the Caspian and Black Seas, and from the Persian Gulf. The great and magnificent square is approached from two sides by very high arched gates, of exquisite architecture, faced with brilliant blue-enameled tiles. On the other two sides are deep arched porches, of the same height and proportions as the gates, but covered with copper tiles, heavily gilt. One porch leads into a fine mosque; the other faces a high, gilded minaret, and the golden dome under which rest the sacred remains of the Iman. The space between the gates and porches is enclosed on all sides by a double story of arched cloisters, fronted with mosaic work and paved with the gorgeous gravestones of rich and holy men. A stone canal conducts water through the centre of the square, for the ablutions of the faithful, and beautiful shade trees abound. The midday sunbeams are reflected gorgeously from the many-colored and golden tiles; and the light of the declining luminary falls glowing upon the resplendent dome. But the most glorious effect is produced when rain falls while the sun is breaking through light clouds, causing the large drops which are shed from the golden tiles to glitter like enormous diamonds. This sparkling shower on the gilt dome is often worshipped as a down-pour of heavenly light, and excites the pilgrims to a perfect frenzy of enthusiasm.

But Meschid presents other sights and sounds than those of religion and pleasantness. Hundreds and thousands of beggars, of the most miserably squalid appearance, beset every approach to the shrine, waylaying the pilgrims in every direction. Old men and women, in the most abject states of want and misery, throng the streets, which are also strewn with children, not more than two or three years old, grovelling in the dirt, mere living skeletons, more like starved young animals

than human creatures. Some are crying and sending forth piteous petitions with their little half-quenched voices; others, silent, lying like dead things; others, listless and motionless, but with a wolf-like glare of hunger in their sunken eyes, giving terrible evidence of the fierce pangs which gnaw within them. Blear-eyed girls and filthy boys carried things like starved cats in their arms, all squalling for bread. Fraser ran the gauntlet of a crowd of spectres of this kind, nearly half a mile long. Most of them were the wives and children of Turcomans from the eastern borders of the Caspian Sea, whose towns had been sacked by the Meschidees. The able-bodied men and women had been sold as slaves, and the old people and children thus left to beg or starve. As many as 3000 to 4000 persons have been brought into Meschid at one time, and the feeble left to the tender mercies of pilgrims and strangers.

Cholera is always carried from Meschid to Astrabad, on the east coast of the Caspian Sea, by merchants and pilgrims, and then forwarded up to Astrakan. It is also conveyed from Meschid to Teheran, the capital of Persia, situated only 70 miles south of the lower border of the Caspian Sea.

TEHERAN is one of the most important centres for the reception and distribution of cholera. The disease not only reaches it from Meschid and the east, but also comes up from the Persian Gulf, by way of Bushire, Shiraz, and Ispahan. Although Teheran has 80,000 inhabitants, no city in Persia makes so poor an appearance on first approach. There is not a dome or minaret of any size to decorate it; nor is it surrounded by woods and gardens, like Damascus. All that meets the eye is a line of mud walls and bastions, surrounded by many ruins, in the midst of a gravelly plain bounded by rugged mountains. The streets are narrow, unpaved, and exceedingly filthy. The bazaars are extensive, but wretchedly kept and very dirty; and the climate is so unhealthy in the summer, that the greater part of the inhabitants are obliged to leave the city.

From Teheran, cholera is always carried due north to RESHDT, at the foot of the Caspian Sea, whence it is distributed to every port on the west coast of the Caspian, *viz.*, Leucoran,

Saljan, Baku, Derbent, Kisliar, and Astrakan. It also passes up all the rivers which empty into the Caspian, and thus invades the whole country between the Caspian and Black Seas.

From Teheran, the disease is always carried north-west, to Kasbin and the great city of Tabriz.

Tabriz has 80,000 inhabitants, and is the most important city, in a commercial point of view, in all Persia, for it is the great mart of European merchandise. The transit trade to and from Persia is immense, almost beyond calculation; and it is the grand depot into which Russia, Germany, Turkey, and England pour the fruits of their industry and enterprise, to be distributed to the vast regions beyond. Its bazaars and caravansaries are numerous and extensive, built of brick and lime, finely arched, and among the most durable structures in the world. But its streets are narrow, crooked, irregular, only partially paved, and very sombre, for no windows open from the houses towards the streets, which present nothing to the eye but a dull line of mud walls, eight to fifteen feet high, pierced by gates and doors so low that one must stoop to enter them. But the houses of the rich are beautifully finished inside, and have fountains in their beautiful court-yards surrounded by trees and shrubs and filled with singing birds. Even the poorer houses have open rills and running streams in their yards, conducted there from the larger canals. The climate is delightfully healthy; warm by day, but deliciously cool at night, when a strong breeze blows diurnally from the Caspian. It is elevated 4000 feet above the level of the sea, and looks down from the head of a vast amphitheatre upon a fertile plain, 30 miles wide. Scarcely a cloud appears in the clear atmosphere from early spring till late in the autumn, and the whole neighborhood is so healthy that the name of Tabriz is derived from *Tab* (fever) and *reektan* (dispersing); yet, cholera is always conveyed to it from Teheran. It appeared there in 1823; again, in 1828 and 1829, and killed 5000 persons; in August and September, 1845, it is said to have killed 400 in one day; and every successive pandemic has reached it, by means of merchants, travelers, and pilgrims, going to and from Meschid and Mecca.

From Tabriz, cholera is always carried due north, through Erivan to TIFLIS, and thence up to Astrakan, on the Caspian; and also north-west, to Erzeroum, and from thence to TREBIZOND, on the Black Sea.

ERZEROUM, to the north-west of Tabriz, is one of the oldest cities in the world. It is situated at the base of the Ararat range of mountains, at the head-waters of the Euphrates, and claims to have been founded by a grandson of Noah. Its trade is immense, as it is situated felicitously for the transit of goods from Europe, Asia Minor, Syria, Persia, Turkey, and Russia. Almost weekly, a commercial caravan starts for Tabriz, consisting of from 300 to 900 horses, laden with English, German, and Russian goods, along a road laid out by the ancient Genoese, and still marked by the ruins of their forts.

A caravan of horses generally starts at 2 A.M. The guide, or Karavan Baschi, gives the signal by a peculiar cry, and the horses respond by a general snorting, neighing, and tinkling of the bells on their necks. Notwithstanding the thick darkness of the night, such is their intelligence that each horse soon finds his owner or driver, and stands motionless until the pack-saddles and bales of goods are duly balanced and fastened on its back; then starts off on his own accord, finds his proper place in the train, in files two abreast. The oldest and most experienced horse takes the lead, proud of the distinction, tossing his larger string of bells, of which every fifth or sixth horse has a smaller one, the tones of which are cheerful, if somewhat monotonous. Thus they wend their patient way, under their huge burdens, stretching in files of miles in length, over hills and through valleys, never straying or shying, and displaying an instinct, almost amounting to reason, in overcoming obstacles, and never attempting to cross a stream until the proper ford has been indicated to them. In winter they are obliged to push on from 20 to 25 miles a day, to reach shelter; but in summer, they find abundance of forage, and travel more leisurely. This may not be the sublimity of commerce, but it forms a pleasant scene. The muleteers are good Mohammedans, who never seek retirement for their prayers, but commence at

the moment prescribed. Wherever they may be on the road, they tumble off their horses, face towards Mecca, commence their prayers, then rise and ride on quickly to overtake the train, give a few directions, mingled with more curses, to their underlings; dismount again to resume their devotions, repeating this process, interlarded with many blows upon their horses, until the customary prayer is all completed. Quip, crank, laugh, and roundelay pass along the line all the march, and at night, in summer, the merry muleteer sleeps upon the bare earth. In the winter, they crowd into huge sheds, the front part of which is used as a stable, the rear as a hotel. These dirty holes have platforms raised 2½ feet above the mud floor, to enable the guests to keep out of the litter and dung which carpet the floors of these elegant refectories. All the platforms are covered with mats, decayed through age and filth, and equally old and dirty mattresses and pillows. Upon these, the travelers sleep in their wet cloaks and dirty boots, forming a loathsome combination.

From Erzeroum, cholera is always carried to Trebizond by caravans, in which 26,000 horses were employed in 1834, some merchants using from 500 to 1000, each carrying 300 pounds. Several times a week one of these cavalcades arrives, pouring itself into some of the huge caravansaries, and depositing its heavy loads of Persian and other goods in huge piles, almost like small mountains. And quite as often, equally large trains set out for Erzeroum. The scenic effects of the town are very great in every direction, whether we look up at it from the sea, or down upon it from the lofty hills behind and observe the Black Sea, the city and surrounding country spread out in a picture of almost unequalled beauty and grandeur. The view extends along a broken line of coast, from whence rise lofty mountains, piled one upon another, until they reach the snow. Although the streets are exceedingly narrow, crooked, and filthy, like those of all Eastern towns, yet they have charms peculiar to Trebizond; for, in riding along, one often suddenly emerges upon one of many romantic bridges which span deep ravines, at the bottom of which tiny rivulets run down to

the sea, and the precipitous sides of which are covered with dense foliage and vines which cling to lofty trees and clamber up to overrun the walls of castles perched upon their dizzy brinks.

From Trebizond, which is almost the only port at the south-east end of the Black Sea, cholera is regularly carried by sailing and steam vessels to Constantinople, Sebastopol, and Odessa, and also up the Sea of Azof to the mouth of the River Don.

To return to Tabriz: we have already seen that cholera is always carried up between the Black and Caspian Seas to Erivan and Tiflis; and from Tiflis to Astrakan on the Caspian, and the towns of Azof, Tagonrog, and Tcherhask on the Sea of Azof, and thence distributed up into Russia. This is now so well known that it requires no proof. But we must give a description of the *houses* in Persia, Armenia, Georgia, and Circassia, which will account for much of the terrible ravages which cholera always commits when it reaches these countries. The structures are still made and the people live exactly in the manner described by Xenophon, who traversed this country and embarked at Trebizond with the immortal 10,000. In the summer-time, in riding along, one often finds one's self on the top of hillocks covered with grass, upon which cattle are grazing; but smoke, issuing from piles of stones a few feet high, makes one suspect that he is riding on the tops of houses and over a village; and soon, from holes in the ground, like rabbits from their burrows, men, women, children, and dogs rush up in abundance. Then one descends into a yawning cavern and dark gulf, filled with smoke, dust, glare of torches, uproar of lowing and bleating beasts, crying children, crowing cocks, and gabbling women, until one believes that he has got into a modern Noah's ark anchored in the ground. The place is dark as pitch, even at noonday, and the bewildered stranger is led along, continually slipping in fresh cow-dung. These vaults sometimes cover an acre of ground, and are divided into an interminable number of rooms and cellars. A multitude of cows and calves often stream out unexpectedly from some side room, and nearly upset and suffocate one in the ocean of their filth. Sheep are herded in other nooks, and lambs trot all

about and into the women's apartments. The horses are stabled more carefully, and a collection of unlovely women and children occupy separate apartments, into which only dirty men, a few lambs and calves, various chickens, or a favorite filly, occasionally intrude. Old men are found sitting about, with long white beards like those of the shepherds of Lot and Abraham. Fraser and Fisher, who often lodged in these places, were generally obliged to turn out some favorite horse or pet cow, in order to obtain sleeping room; the ground was then swept over, and dirty rugs were placed for them to sleep upon. Occasionally, a big he-goat would bound into their sanctum, with a loud ba-a; and above their heads were generally perched a whole brood of roosters, of all ages and all voices; some with colds and sore throats, but all eager to display their vocal accomplishments, in one unremitting crow. From midnight to daybreak, the challenge often flew from roost to roost, and every few minutes a full chorus was struck up. The smell, heat, and noises of the animals were intolerable, and the vermin active; yet, from three to five generations of human beings always live, cook, eat, and sleep in these foul holes. They are made by digging a tank in the ground, lined with rough stones for walls, covered overhead with huge timbers, and these again with sticks, bushes, and dry grass; then terraced over with a thick bed of earth, upon which sods and grass are planted.

Medical College of Alabama.—The friends of this college will be glad to learn that it has been reöpened. We quote from the circular received: "The Faculty has been reörganized and a full corps of professors are ready to devote their time and energies to the cause of medical education in the South." "The professors are all Southern men, born and nurtured on the soil of the South, and now, in the hour of her adversity, they are willing and anxious to do all in their power to raise her to that high destiny which no reverse of fortune or of war can snatch from her sorely tried and faithful sons." Terms: $140 for the session; demonstrator's ticket, $10; matriculation, $5; graduation, $30. Handsome premiums are offered for excellence in various branches. The circular is closed with an appeal to all, for encouragement and support.

ARTICLE XXXI.

REPORT ON THE PATHOLOGY AND TREATMENT OF EPIDEMIC CHOLERA.

BY N. S. DAVIS, M.D., Professor of Practical and Clinical Medicine, in Chicago Medical College.

Presented to the Illinois State Medical Society, May, 1868.

At the annual meeting of the Illinois State Medical Society for 1867, the writer was appointed a Special Committee to report at this meeting on the causes, pathology, and *treatment* of that much dreaded scourge called, variously, Epidemic, Spasmodic, and Asiatic Cholera. But few subjects could be selected from the whole field of Therapeutics and Practical Medicine concerning which a greater diversity of views have been presented and acted upon, or concerning which the professional mind is more unsettled, than the one now under consideration. In the following report no attempt will be made to criticise the views of others, or to reconcile the apparently conflicting statements found in our medical literature. On the contrary, it will be limited mostly to a plain statement of the writer's own views of the treatment of cholera, as derived from direct observation at the bedside of cholera patients.

My opportunities for observation commenced in the summer of 1849, during the severe epidemic which prevailed at that time in the city of New York, and were continued in Chicago during the epidemics of 1850–51–52–54 and '66. To occupy the whole field of investigation assigned to me by the Society would require the writing of a volume rather than a report suitable for reading to a Society like this. And, inasmuch as the causes of cholera are still a subject of active investigation, they will be alluded to simply in this paper.

The essential cause of cholera, or the specific cholera poison (if such an agent exists), is still involved in mystery. The most popular theory at the present time is, that it consists of a highly poisonous organic body, developed in the gastric and intestinal evacuations of patients laboring under cholera, and

capable of being transported from place to place by such evacuations, either freshly voided, or by adhering to clothing, or by diffusion in the soil (Pettenhoffer), when there is a water-bearing stratum near the surface. Some observers have claimed to discover the specific poison in the cholera dejections, by the aid of the microscope. That such dejections contain an abundance of animalcules when voided, and that an abundant crop of vegetable fungi or sporules appear in the same discharges when allowed to stand from two to five days in a temperature above 60° Fahrenheit, is unquestionably true.

I have made quite a number of microscopic examinations of the discharges from the bowels, both from patients laboring under ordinary serous diarrhœa and epidemic cholera. In all of them, when examined soon after having been voided, animalcules were abundant, especially those called *vibriones;* and in the samples taken from two well-marked cases of cholera, besides the ordinary vibriones, there appeared two or three animalcules of larger size, more caudate, and moving across the field with great activity. After the discharges had been allowed to stand from two to five days, fungoid growths appeared in abundance, that were not present when first voided.

These are not presented as specimens of the specific cholera poison. On the contrary, so far as my examinations have been extended, they lead rather to the conclusion that these products may be found in all serous discharges from the alimentary mucous membrane, whether in cholera, cholera morbus, or simple diarrhœa. But if the untiring scientific researches of the profession have not yet fully identified some *materies morbi* as the specific cause and propagation of epidemic cholera, they have done what is of equal or greater practical value, namely, pointed out the meteorological and sanitary conditions favorable to its development and fatality. Meteorologically, these conditions are, a warm, damp, still atmosphere, with deficiency in free electricity and ozone. But with these must coëxist such local sanitary conditions as are capable of furnishing either animal or vegetable miasms, or both combined. Hence the disease has always been most prevalent and fatal where human beings were

most crowded together, with the least attention to ventilation and cleanliness, whether in caravans of pilgrims, in emigrant ships, or the low and uncleanly parts of cities. And, whenever invading country districts, it has chosen the alluvial valleys and malarial districts, and wholly passed by the more rugged and primitive geological districts. The truth and value of these observations are both illustrated by a close study of the rise, progress, and decline of an epidemic of cholera in any of our populous cities. For instance, here are two maps, one of Chicago and the other of New York, on which are indicated the districts most infected with cholera in the summer of 1866.

1866. In 7th Ward, 1 case to 100 population.
14th " 1 " 95 "
1st, 2d, 8th, 9th " 1 " 250 "
$\frac{1}{3}$ of whole number of cases in 7th, 14th, and 16th Wards.

1867. August and September.
1st, 2d, 3d, 9th, 10th Wards, 63,000, 1 death in 335.
5th, 6th, 7th, 13th, 14th " 69,000, 1 " 125.

Pathology.—My views of the pathology of cholera can be stated in a few words, as follows:

A direct diminution of that elementary property of living, organized matter, which I call vital affinity, coupled with impaired contractility, or partial paralysis of the capillary vascular system, or, more properly, of the arterioles, and special morbid sensibility of the mucous membrane of the alimentary canal. The coëxistence of these pathological conditions causes, first, diminution of organic changes, and consequent diminution of secretion and calorification, with a sense of weakness and lassitude, accompanied by pallor, intestinal commotion, and occasional thin stools, constituting what has been called cholerine, or the first stage of epidemic cholera. Second: Still further diminution of secretion and calorification, with complete relaxation, or paralysis of the arterioles, which, coöperating with the morbid sensibility of the mucous tissues, causes a rapid exudation or exosmose of the serous and saline elements of the blood from their capillaries, and their rapid ejection by vomiting and purg-

ing, constituting the second or active stage of the disease. Third: The entire suspension of organic changes, including secretion and calorification, with such exhaustion of the watery and saline elements of the blood, as leaves the whole mass viscid and unoxygenated, constituting the stage of collapse.

After much clinical study and observation, during repeated epidemics of cholera, it has seemed to me that the foregoing essential pathological conditions most fully explain both the symptoms during life, and the *post mortem* appearance after death. Whether they arise from the introduction into the blood of some specific *materies morbi* capable of propagation and transportation, or from the influence of some special combination of atmospheric and sanitary conditions, remains for future investigations to determine.

Treatment.—The pathological conditions stated, not only afford a satisfactory explanation of the symptoms and results of cholera, but they equally afford clear indications for a rational mode of treatment. These indications are: 1st. To increase vital affinity and vascular contractility, and diminish the morbid sensibility of the stomach and bowels, thereby preventing the development of the second stage of the disease. 2d. To add to the first indication such measures as will most speedily arrest the rapidly exhausting discharges that characterize the second stage; and 3d. To add to both the foregoing such means as will be most efficient in supplying the lost elements of the blood, renewing the sensibility of that portion of the organic nervous system called vaso-motor, and promoting the decarbonization of the blood. If we were certain that the disease was produced by the introduction into the system of some specific *materies morbi*, of course there would be an indication for treatment, of prior and paramount importance to all those just enumerated, namely, to administer some remedy which would be capable of directly neutralizing or expelling the specific poison. But as we neither know the nature of the supposed poison nor its antidotes, we must pass this item by for the present, and confine our attention to the consideration of such

means as we deem best calculated to fulfil the several indications previously stated.

In doing this, we shall adhere rigidly to the purpose announced at the commencement of this article. To fulfil the indications presented in the first stage of cholera, three things are of paramount importance, *viz.:* rest, pure air, and such medicine as will produce a decided tonic and mildly anodyne influence. By tonics here I do not mean nervous exhilarants, or what are popularly styled diffusible stimulants, but such medicines as produce an increase of vital affinity and consequent tonicity of the tissues. I require the patient to maintain the recumbent position, restrict his diet mostly to milk porridge (boiled milk and wheaten flour), ventilate the room freely, and if the air is damp and impure, increase the ozone by either sprinkling a solution of permanganate of potash or allowing the slow oxidation of phosphorus in it, and give some one of the mineral acids, with a small proportion of an opiate. A formula that I use more frequently than any other is as follows:

℞. Aromat. Sulph. Acid, ---- ---------- ʒiij.
Sulph. Magnesia, ---------- ʒiij.
Tinct. Opii, ---------- ʒiij.
Aqua Menth., ---------- ʒiij.

Mix, and give a teaspoonful, in sweetened water, every two, three or four hours, according to the severity of the symptoms, until all intestinal commotion ceases, and the evacuations become consistent and natural. A dozen combinations might be named, all calculated to produce similar results, but it would be a waste of your time.

In the second stage, I require the same attention to the atmosphere of the room, and the same position of the patient, with the addition of dry warmth to the extremities and strong mustard sinapisms over the abdomen and nearly the whole length of the spine. But now the whole mucous surface, instead of continuing its natural function of *absorption*, has reversed its action, and is rapidly discharging the serum and salts of the blood, with more or less detachment of its own epithelium, as shown by the copious and frequent discharges up and down.

To arrest this process I rely mainly on the following:

℞. Sulph. Morph.,---------- 3grs.
Calomel, ----------12grs.
White Sugar,---------- 3j.

Mix, and divide into 12 powders, one of which is given *immediately* after every turn of vomiting, whether it be once in five or forty minutes. The craving for drink is satisfied as much as possible by small pieces of ice. After every evacuation from the bowels, I direct to be thrown into the rectum an enema of two ounces of cold water, containing half a grain of sulphate morphia, and 10 grains of acetate of lead. If the cramps are very severe, a moderate dose of morphia may be injected hypodermically with advantage. But sufficient caution should be used to avoid *narcotizing* the patient. In using the powders and enemas just mentioned, it is of very great importance to note the manner of their administration. They should be given *immediately after* every evacuation. The act of vomiting is one that cannot be performed continuously; and medicine swallowed just as soon as the effort ceases, and the patient inclines to turn his head down to rest, will remain in contact with the mucous membrane long enough to make some impression before the muscular structures have regained the power to renew the act of vomiting.

But if the physician yield to the inclinations of the patient and nurse to let him rest a *few minutes*, or, as they often express it, "to let his stomach get settled a little," a fresh supply of serous fluid will have accumulated in the stomach, and the muscular fibres are again ready to act, and now the medicine is no sooner swallowed than it is returned by vomiting, and no advantage is gained. The rule to which I call your attention so strongly is applicable to the administration of all medicines or restoratives during the active stage of vomiting. When the vomiting is so far checked as to admit of half or three-quarters of an hour between the paroxysms, I begin to administer restoratives in the form of animal broth, well salted either with common salt or chlorate potassa, and strong coffee; the first to nourish and supply the lost elements of the blood, and the sec-

ond, to sustain the wakefulness and activity of the nervous centres. They must be given at first in only dessert-spoonful doses, but may be increased, if found to be retained by the stomach. If the active progress of the disease is arrested during the early part of the second stage, before great exhaustion has been induced, the remainder of the treatment may be such as we have indicated as applicable to the first stage. But if the discharges have continued until the surface is much shrunken, the pulse very feeble, the urine and other secretions suspended, so soon as the discharges are slightly checked we must not only resort to the cautious but diligent use of the restoratives already mentioned, but remedies to sustain the sensibility of the vaso-nervous system, and consequently secretion, must be resorted to. Of these, probably strychnia is the most reliable. A sugar-coated granule, containing $\frac{1}{3\frac{1}{2}}$ of a grain, may be given every half hour or hour, according to the urgency of symptoms, until some effect is induced. Or, if the stomach will retain it, a teaspoonful of the following formula may be given, in a tablespoonful of water, just as often, *viz.:*

℞. Tinct. Cinnamon, ---------- ℥j.
Nitrous Ether, ---------- ℥ij.
Tinct. Nux Vom., ---------- ℥j. Mix.

This has the advantage of being more diuretic, but its greater bulk and pungency renders it more liable to be rejected. If the patient passes into full collapse, the judicious administration of dilute mucilaginous solutions of non-purgative salts, milk, animal broth, and strychnia, with a continuance of dry warmth externally and free ventilation, will afford the best chance of recovery; but the majority of patients in this stage prove insensible to any and every kind of treatment. If the cholera attack is arrested at any stage, and the patient passes into a slow consecutive fever, it must be treated on the same principles as the ordinary enteric typhoid fever. I have thus endeavored to give you, in the shortest possible space, the principles which govern my treatment of epidemic cholera, and some of the medicines and formulæ on which I most rely.

I have used a great variety of remedies in the second or ac-

tive stage of this disease. I have seen a few cases promptly arrested by the internal use of chloroform, in doses of 10 drops every 20 minutes, and a larger number by the combination of chloroform, Cannabis Indica and morphine, called *chlorodyne.* I have treated some with salines—some with salt and mustard emetics—have bled some from the arm, and cupped others both over the spine and epigastrium; and have seen several treated with purgatives, mercurial, saline, and oleaginous. And I have seen some patients recover under all these kinds of treatment, and have seen a larger number recover under no treatment at all, except rest and diluent drinks. The special mode of managing cholera recommended in this paper I was led to adopt during the epidemics of 1849 and 1850, and through all my subsequent experience it has been with me far more successful than any other plan that I have tried, or seen tried by others.

I think the most *fatal* of all the methods of treating cholera that have yet been practised is that which relies mainly on opiates and alcoholic inebriants. In conclusion, I would make one suggestion. It is now very generally considered that sulphate of iron and permanganate of potassa are the most reliable disinfectants for rendering innoxious the dejections of cholera. If there is any truth in the theory that cholera is caused by a specific poison, derived from cholera dejections, would not the early and persistent internal administration of sulphate of iron neutralize the poison in the system, and arrest the disease? Has it or the sulphites been tried?

A few pages might be added on paphylaxis, but I have already trespassed on your patience too far.

ARTICLE XXXII.

NEW METHODS OF TREATING URETHRAL DISEASES.

By J. S. SHERMAN, M.D., Chicago.

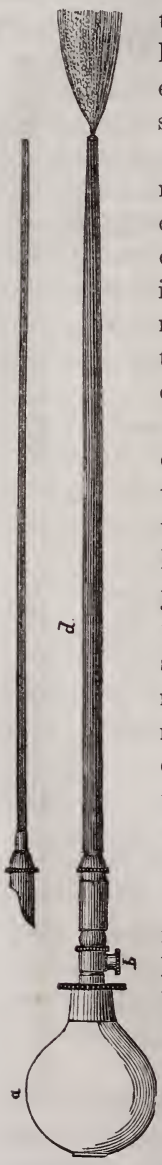
The frequent failure of the ordinary treatment pursued in urethral inflammations and the continuance of many blennorrhœas, not only for months, but of years, has shown the insufficiency of the old methods. There is in these diseases, as in all others, a strong tendency to spontaneous recovery; yet there are several satisfactory reasons why inflammations of the urethra so often resist treatment:

1st. The disease is in a position where it is difficult to make the necessary local applications. The attempt to accomplish this by means of injections is very insufficient; the fluid remains but a short time in contact with the diseased surfaces, and it is seldom that the patient or surgeon succeeds in carrying it more than one-half the depth of the canal, the accelerator urinæ muscle preventing its further progress. The internal administration of copaiba, cubebs, and the terebinthinate preparations, with the hope of influencing the disease by the contact of urine impregnated with these remedies, is so often followed by severe gastric disturbance, that the patient prefers the disease to the treatment; and in the chronic cases of urethritis these remedies are useless.

2d. The constant contact of the inflamed walls of the urethra, bathed in specific pus, is not only a cause of the rapid extension of the malady, but also of its pertinacity and obstinacy. The poison is ever present in the pus, and the inflammation aggravated by the contact of the diseased surfaces. These conditions are certainly not overcome by injections or internal administration of drugs.

3d. There is a tendency in the mucous membrane of the urethra to develop granulations similar to those formed on the eyelids. The histological character of the urethral membrane

is very similar to the conjunctiva of the eye, and gonorrhœal inflammations of these tissues frequently terminate in granulations. This fact was first discovered and made known by M. Desormeaux, who, by the aid of his endoscope, was enabled to demonstrate them in some cases.



(Fig. 1.)

From these conditions, the indications for treatment are plain: the destruction of the specific character of the pus, and complete separation from contact of the diseased surfaces, being the most important. Astringent effect is valuable in diminishing vascularity; yet if the first two indications are successfully met, the vascularity and consequent production of pus will rapidly subside.

For the means and manner of applying remedies directly to the urethra, in such a way that they remain long in contact with every portion of the canal, we are indebted to the ingenuity of M. Mallez. His special attention has for several years been devoted to genito-urinary diseases, and the results of his study are given to the profession in the first volume of his "Album d'Anatomie Pathologique," containing photographic representations of these diseases, taken directly from dissections. From personal observation of cases treated by him, I have no hesitation in saying that better results are obtained by his mode than I have seen follow any other plan.

(Fig. 1.) represents an instrument for applying remedies, in the form of powders, to the urethra. It consists of the following parts: *a*, a small rubber sack, terminating in a metal tube, which is provided with a valve at the point *b* opening inwards and allowing air to enter, but closing when the sack is compressed; *c*, a scoop, which is received in the larger tube and terminates in a small elastic catheter; *d*, a large elastic catheter, into

which the smaller one is easily passed, leaving a space between the two. The larger should project somewhat beyond the smaller. It is thus used: The large catheter is first introduced into the urethra, beyond the point of disease, and being elastic, it can be passed into the prostatic portion if necessary. The secretions which have accumulated in the tube are removed with a pledget of cotton. The powder to be applied is then placed in the scoop, and connected with the sack. The small catheter is passed into the larger one and the sack compressed. This carries a current of air through the instrument, and with it the powder, which is deposited on the mucous membrane, at its termination. If the instrument be slowly removed, at the same time that the insufflations are made, the whole interior of the canal will receive a coating of the powder, and portions which could not be reached with injections will be effectually acted upon. The powders must be blown with considerable force, in order that they may impinge strongly on the mucous surface.

The remedies used must be finely powdered, and will vary according to circumstances. The sub. nit. bismuth is very valuable, and often of itself proves sufficient. It adheres firmly to the membrane, and forms a coating which effectually separates the diseased surfaces. The following will be found applicable to a majority of cases:

℞. Potas. Permanganate, ---------- gr. j.
Quiniæ Tannate, ---------- gr. vj.
Bismuth Sub. Nit., ---------- ℥ij.
M. S. Use as an insufflation, once daily.

Various other remedies may be used, as tannin, sulph. copper, zinc, etc. The only caution necessary is, that the powders be not used too strong. When the disease is produced by stricture, dilation offers the only chance of cure.

Remedies which cannot be used in the form of powders, may be applied as ointments, by means of the spiral (Fig. 2.) bougie, shown in (Fig. 2.) It is made of wax, and has the sur-

face marked with a spiral groove, into which the ointment to be used is placed.

The local application of carbonic acid gas to the urethra and interior of the bladder is a valuable means of allaying morbid sensibility. Spermatorrhœa, when accompanied with tenderness in the vicinity of the ejaculatory ducts, is frequently rapidly benefited by its use. It is a powerful sedative to mucous membranes. Its reputation in gastric irritation is well established, and it can be applied to the urethra and bladder effectually and with great benefit. In vesical catarrh it will be found a valuable remedy.

A simple way of using it is to collect the gas in a rubber sack, to which is attached a tube that can be introduced into the bladder. The gas is then forced in by pressure. Care must be taken that we do not distend the organ beyond proper limits. The same principles of treatment are applicable in vaginal diseases of the female.

Powdered substances have, in the manner described, been applied to the dead subject, and dissection has shown the urethra completely covered with the substance, proving the thoroughness of the application.

Acute cases are very promptly cured, and the discharge is often immediately arrested. The old and chronic ones, which have lasted for years, require time, varying from three to six weeks.

ARTICLE XXXIII.

"POSITION" IN THE TREATMENT OF CHLOROFORM POISONING.—CARBOLIC ACID IN THE TREATMENT OF CONJUNCTIVITIS.

By E. L. HOLMES, M.D., Lecturer on Diseases of the Eye and Ear in Rush Med. Col., and Surgeon to the Chicago Charitable Eye and Ear Infirmary.

The subject of anæsthetics does not fall specially within the province of your Committee on Ophthalmology; and yet, there are a few points, which I consider of some interest in connec-

tion with the administration of ether and chloroform in ophthalmic surgery.

I have observed a few facts, in operating upon the eye, which I deem of very great importance, as bearing upon the treatment of patients presenting alarming symptoms during the inhalation of chloroform. It is not my object to discuss the comparative danger in the use of chloroform or ether, nor the circumstances upon which the danger depends. It has been my fortune to observe the administration of both agents in a very large number of cases, under the care of many different and eminent surgeons. I have also administered chloroform more than 400 times myself. Till quite recently, I had never witnessed a single case in which there was any apparent danger to the patient.

Some time since, two male adult patients, to whom I administered chloroform, suddenly ceased breathing, the pulse at the wrist becoming at once imperceptible, the sound of the heart, however, being audible to the ear placed upon the chest. The removal of the chloroform, alternate pressure and relaxation of the chest, and cold water thrown upon the face, speedily aroused the action of the heart and lungs.

I may state that in administering ether to a patient 76 years of age, the respiration suddenly ceased, although the pulse, very much reduced in force, continued. The appearance of the patient was alarming, the countenance being somewhat livid, cool, and haggard in expression, and the eyes rolled upward. It required considerable exertion to restore the patient.

Every surgeon has, not unfrequently, observed that chloroform produces considerable pallor, prostration in the action of the heart, arteries, and lungs, apparently without any imminent danger. In all such cases, as well as in the two just described, the danger seems to depend entirely upon syncope. I have never witnessed a case in which there was turgidity of the vessels and redness of the face, in which there was not also a regular pulse, and a regular, though often stertorous, respiration, causing, perhaps, a peculiar heaving motion of the head. On

several occasions, as I observed this tendency to syncope, although I saw no reason for alarm, I directed, experimentally, my assistants to raise the foot of the table sufficiently high to place the patient with the head downward on an inclined plane of at least 40°. I found, invariably, that the pulse at once became fuller and more frequent, and that the color returned to the face.

Subsequently, in administering chloroform to a patient at the Chicago Charitable Eye and Ear Infirmary, the breathing and pulse, almost without warning, suddenly ceased. Although the pulse and respiration had been quite good, there still had begun to be a peculiar "cold perspiration" upon the brow, and a cold, moist condition of the hands, which I attributed to the depressing influence of fear, under which the patient was laboring. I was watching the patient most carefully, thinking in this condition he should receive no more chloroform, when he ceased to breathe. His aspect was most appalling; the face and hands were cold and wet, the features pinched, muscles of the face relaxed, lids half opened, and the cornea turned upward. The foot of the table had not been raised 15 seconds, the tongue having at once been withdrawn, before the pulse reappeared at the wrist and the respiration was reëstablished. Upon restoring the patient to the horizontal position, the pulse and respiration again ceased. The elevation of the foot of the table, however, again reëstablished the action of the heart and lungs.

Some time after this occurrence, precisely the same symptoms appeared during the inhalation of chloroform. The patient was a young, strong man. In this case the pulse, for a few minutes, was growing less frequent, although the breathing continued quite strong and regular, till, without further warning, the pulse and breathing suddenly ceased. The appearance of this patient was as frightful as in the case of the other, just described. A similar mode of treatment restored, at once, the action of the heart, some seconds passing before the respiration was fully reëstablished.

I have had an opportunity, at the Infirmary, of demonstrat-

ing, experimentally, to students and physicians, more than thirty times, in cases where there was no apparent danger, and yet where there was a tendency to pallor and weakness of the pulse, that, in the position I have described, the cheeks became instantly flushed and the pulse stronger.

In administering chloroform, I always use a napkin, folded several times, upon which the anæsthetic is poured in small quantities at a time, care being taken that a free current of air can pass to the mouth under the napkin. The patients are always in a horizontal position. I watch, with great care, the condition of the pulse and respiration; and yet, it is sometimes somewhat difficult to distinguish the difference between the effects of fear and those of the chloroform.

Whatever may be the obscure causes of fatal results from the use of chloroform, I believe the danger, in by far the larger proportion of cases, depends upon a tendency to death by syncope. To overcome this tendency, it is necessary to stimulate the nervous centres. This may be done by causing a column of blood to press upon the vessels of the brain. It is not sufficient to remove the pillow from the head and place it under the hips. It is necessary that the whole body be placed upon a steep, inclined plane, to force as much blood as possible, by gravitation, into the brain. I believe this is of more importance than any of the methods usually described by writers on the subject. It should take precedence to the withdrawal of the tongue, artificial respiration, galvanism, or stimulants. This remedy can always be applied without delay, and can be followed by any others which may seem desirable.

I have dwelt upon this subject of position, because so little is said upon it, either in the best works upon anæsthetics, or in the reports of the treatment in fatal cases, as found in medical journals. We have reason to believe that very few surgeons or obstetricians have ever placed a patient in the position described, in cases which threaten to terminate fatally.

I have employed large and frequent doses of bromide of potash, as recommended by Dr. Stone, both before and after the administration of ether, as also of chloroform, to prevent nau-

sea, but have not observed any beneficial result. It is highly desirable to possess some agent to prevent nausea and vomiting, especially in the extraction of cataract, since the vomiting may cause the expulsion of the vitreous humor, and protracted nausea, and consequent loss of appetite, may prevent union of the corneal wound, by impairing nutrition.

CARBOLIC ACID IN THE TREATMENT OF CONJUNCTIVITIS.

The valuable properties of carbolic acid, as an application in diseases of the throat and gums, has been shown by dentists, and physicians who give special attention to diseases of the throat. The good results of its use in these diseases, induced me to try it in diseases of the conjunctiva. I have found in about a dozen cases, at the Infirmary, both of acute and, especially, of chronic inflammation, that the patients made a good recovery under its use.

It is doubtful whether it possesses any advantage over the ordinary astringents, and yet it may be a desirable agent in cases where the usual applications fail. In two cases of purulent conjunctivitis, its use between the applications of nitrate of silver, after the latter had been tried two days, seemed to rapidly overcome the excessive discharge of pus. Possibly, its antiseptic properties may aid in destroying any specific poison that may exist.

When applied, in a saturated solution, to the conjunctiva, as also to the mucous membrane of the mouth, it produces an intense burning pain, which almost invariably subsides in a few moments. It produces a thin, white pellicle on the surface where it is applied, which is soon cast off, leaving scarcely any irritation.

ARTICLE XXXIV.

CONCENTRATED REMEDIES.

By F. R. PAYNE, M.D., Marshall, Ill.

Read before the Clark County Medical Society, July 1st, 1868. Published by request of the Association.

It is our purpose in this paper to briefly refer to some of the organic remedies which, by long experience, we have found valuable aids in assisting nature in the removal of disease. It should always be borne in mind by the physician, that nature tends, in a majority of cases, to repair injuries inflicted upon the body, and throw off morbid or deranged conditions of the system. This instinctive power, if properly aided by a judicious and rational system of hygiene, often effects the cure, especially in those of a mild character. If a disease presents itself for treatment it is the duty, and demanded of all honest and honorable physicians, to inquire and satisfy themselves whether or not hygienic means are capable of accomplishing the objects desired; if so, they should always be employed in preference to medicine. We too often ascribe the credit to some remedy, when nature performed the cure.

It is my purpose, on this occasion, to present some remedial agents which we regard as worthy of favorable consideration.

ACONITIN.

This is derived from the *Aconitum Napellus*, or wolfsbane, and is contained in both the leaves and roots. It has three principles: resin, neutral, and alkaloid. Its properties are diaphoretic, diuretic, alterative, antispasmodic, and narcotic; consequently we can, with at least a fair prospect of benefit, employ it in the treatment of phthisis, dropsy, gout, rheumatism, and nearly all forms of nervous disorder.

When given in small and repeated doses, it excites diaphoresis and diuresis, and increases many of the secretions. Its continued use for a long time may produce exanthematic eruptions and itching, and, frequently, pain in the joints. In overdoses, it will produce paralysis of the tongue and pharynx, suffoca-

tion, vomiting, diarrhœa, convulsions, and death. The dynamical effects of this remedy show conclusively that it is a stimulant to the nervous system.

These physiological influences of aconitin make it a valuable agent in arousing peripheric secretions, chronic diseases of the sheaths of muscles, nerves, and tendons.

We have found either aconitin or alcoholic tincture of aconite leaves a valuable arterial sedative; it is in the latter form we usually prescribe the remedy. We have given it with marked benefit in some cases of epilepsy and neuralgia; it is a valuable local remedy in tic-douloureux. The dose of aconitin is from $\frac{1}{2\,4}$ to $\frac{1}{1\,2}$ of a grain, and the tincture 6 to 10 drops every 4 or 6 hours.

XANTHOXYLIN.

This remedy is obtained from the *Xanthoxylum Fraxineum*, or prickly ash. The part used is the bark, and contains a resinoid and neutral principle. Its properties are stimulant, alterative, sialogogue, and, to some extent, tonic. It may be employed in rheumatism, colic, indigestion, paralysis, etc.

We have used this agent extensively, and have great confidence in its value as a remedy in the above diseases. It is true that we generally use it in combination with other appropriate agents. It is a valuable medicine in arousing the activity of the muscular fibres of the stomach and bowels, and excites an increased flow of the gastric and digestive juices, and thus aids in establishing normal action of the mucous surfaces. We are perfectly satisfied, by long experience, that it is a valuable addition, and gives additional permanency to the remedial influences of other tonics and stimulants. The active principle may be given in from 2 to 4 grains.

In combination with fraserin, we have found it valuable in chronic diarrhœa and improving cases of dysentery. We frequently use the bark, but it is much more convenient to have the active principle, provided always we can get that which contains all of the medicinal properties of the bark.

FRASERIN.

This remedial agent is derived from the *Frasera Carolinensis*,

or American colombo. The part used is the root, and it contains, by chemical analysis, a resin, neutral, and muci-resin. The properties of this remedy are, tonic, stimulant, and slightly astringent.

We have employed it with marked benefit in many cases of indigestion, debility, and chronic dysentery; but the mucous membranes seem to be especially benefited by the use of this remedy. We have used it with marked benefit in weakness of the digestive organs, and in all disorders resulting from abnormal action of the digestive apparatus. We frequently administer it in combination with *gentiana ochroleuca*, with decided benefit in all derangements of the digestive apparatus. The dose of the active principle is from 3 to 8 grains, but the powdered root may be administered in from 10 to 30 grains.

PRUNIN.

This medicinal agent is found in nearly all parts of the United States. The prunin is obtained from the *Prunus Virginiana*, or wild cherry. The part used is the bark, and it contains a resinoid, neutral, and amygdalin. The properties of this remedy are stimulant, tonic, expectorant, and sedative. The seeds of this tree contain prussic acid, and are beneficial in colds, coughs, incipient phthisis, and bronchial affections attended with severe cough.

The prunin may be given with every hope of success in ordinary cases of debility caused by cold and protracted cough. In those cases where there is a tuberculous tendency, bitter tonics are liable to impair the appetite, and thus favor disintegration; but prunin, or even the bark or seed of the wild cherry, may be administered without fear of nauseating the stomach. It contains a peculiar principle that promotes the appetite, strengthens digestion, and quiets spasmodic cough by allaying the irritability of the nervous system. It calms inordinate action of the heart and arterial system. When we cannot conveniently procure the prunin, we recommend the use of the cherry-seed, bruised and put into a sufficient quantity of spirits to preserve them. We have, in some cases where there is constriction of the chest and dyspnœa, found it beneficial to

combine prunin with eupatorin, veratrin, and other antispasmodics and expectorants. The dose of pure prunin is from 2 to 8 grains. It is of vast importance, in using these concentrated remedies, that we procure pure and genuine articles.

HYOSCYAMIN.

This is said to contain all the medicinal virtues of the *Hyoscyamus Niger*, or henbane. Its properties are anodyne, antispasmodic, soporific, narcotic, diuretic, and laxative.

We have frequently used this remedy in neuralgia, pertussis, bronchitis, and all catarrhal and nervous affections. We regard it, in combination with belladonin and podophyllin, as a superior remedy in costiveness, and many forms of female diseases, where the nervous system is implicated. Our usual mode of administration is in a small pill, and we proportion each article according to its properties and physiological effects and the peculiarity of the disease. We have very seldom prescribed this pill without future calls for the same medicine. Great care should be taken in the quantity of atropin.

The various officinal preparations of this plant are often uncertain. When a genuine article is procured, we may confidently expect beneficial results in the treatment of delirium, puerperal insanity, after-pains, cough and dyspnœa, neuralgia, rheumatism, irritable ulcers, and hemorrhoids. In hyperæsthesis of the nervous system, acute morbid sensibility of the organs of special sense, this remedy will be found invaluable. The dose is $\frac{1}{4}$ to 1 grain.

ATROPIN.

This is derived from the *Atropia Belladonna*, or deadly nightshade. Its properties are narcotic, anodyne, calmative, antispasmodic, alterative, resolvent, and diuretic. We have employed it in epilepsy, convulsions, scirrhus, pertussis, costiveness, and nervous affections generally, with decided benefit. The dynamical effects of this remedy when given in small doses are, thirst, dryness of the fauces, difficult deglutition, deluded vision. When given in overdoses, alkalies, especially liquor potassæ, is a good antidote.

It seems to be pretty well established that its chief physi-

ological effects and therapeutic use, as an internal remedy, depend upon the decided influence it exerts upon the pneumogastric nerve. If we cannot procure a reliable preparation of atropin, we use the solid extract in from $\frac{1}{6}$ to $\frac{1}{2}$ grain doses; the proper dose of atropin being from $\frac{1}{24}$ to $\frac{1}{12}$ of a grain.

We have no hesitancy in recommending this remedial agent as one of superior value in the diseases above enumerated. The important indications in the employment of this remedy are in the formative stages of organic affections. It has a decided influence in overcoming the abnormal sensibility which produces and accompanies structural change. The use of other stimulating resolvents, not possessing the auxiliary properties of this, would, in all probability, increase the irritation and thus favor structural lesion. We have used it with decided advantage in the prevention of abortion resulting from increased sensibility and contractility of the uterus.

We generally combine it with other appropriate remedial agents. It is a powerful remedy, and should be used with great care, especially in children; and, in fact, when given in large but not poisonous doses to adults, it produces extensive dilatation of the pupils, and alarms the patient. This effect is often produced by the local application of the remedy.

It is my intention, at our future meetings, to continue the presentation of remedies, both organic and mineral, which we have found beneficial in assisting nature in the cure of disease; and we would be pleased to have the members of this Society, at each meeting, give their experience for or against the various remedies now used in practice.

Therapeutics, which means "I cure," is a very important department of our profession, but it is intimately connected with pathology. A thorough knowledge of disease is indispensably necessary if we hope to be successful therapeutists.

ARTICLE XXXV.

NOTES AND OBSERVATIONS IN GENERAL PRACTICE.

By JOHN FORMAN, M.D., of Chicago.

THE CARBO-SULPHITES IN PUERPERAL SEPTICAMÆ.

The following case seems an excellent example of the value of the carbo-sulphites in the treatment of puerperal septicamæ, in the twofold sense of a deoxidizing and catalytic agent.

On the 22d July, I was requested by Dr. Rawson to join him where he was in attendance upon Mrs. C., who was in labor with her sixth child. Dr. R. stated that he had been in attendance four hours, and although labor-pains had continued regular, very frequent, and vigorous during the whole of that time, not the slightest progress had been made. At 1 P.M. I found a polypus protruding from the vagina, and traced its connection to the posterior lip of the *os uteri.* In shape and size it resembled a Jargonelle pear. The *os uteri* was fully dilated and dilatable; membranes intact; head presenting, face to sacrum; occiput tightly wedged, and resting on the *os pubis;* repeated efforts with the hand to relieve it were futile. After waiting three-quarters of an hour, and observing the patient's strength rapidly diminishing, from the pressure of vigorous pains every two minutes, without any progress, applied Prof. Simpson's long forceps, and, after exercising considerable force, succeeded in delivering a large female child. Alarming hemorrhage immediately followed; the placenta was at once removed, the uterus grasped with the hand internally, and ice applied over the pubic region; free bleeding still continued, which was traced to the polypus, which had been lacerated. This was secured and ice-water cloths applied, renewing them at short intervals. In the course of an hour and a-half bleeding entirely ceased, leaving our patient much exhausted, frequently bordering on syncope. Stimulants and ice-water were freely administered. At 6 P.M., she began to rally; pulse small and

quick; skin hot and perspiring; intense thirst; temperature of room 96.° To continue stimulants. Milk and ice.

23d, 8 A.M.—Patient feels very uncomfortable; slept none; has headache, thirst, and skin hot; temperature in axilla 110°; temperature of room 92°; abdomen distended and tympanitic; uterus not contracted, very tender on pressure, particularly over right iliæ; no after-pains; no lochial discharge; fœtor very strong. The uterus was injected with a quart of tepid water, containing a drachm of carbolic acid crystals, and repeated three times a day. A scruple of sulphite of soda, six grains of crystallized carbolic acid, with half a drachm of liquor secali, were ordered every four hours, with stimulants and a nourishing regimen.

Little improvement took place until the evening of the 25th, when uterine discharge appeared, and the pulse and temperature of the skin simultaneously fell. The carbo-sulphite mixture was continued, with a good, nourishing regimen; the deodorizing injection used twice a day, for two days more; when our patient was convalescent.

Remarks.—Although puerperal septicamæ never reached the typhoid stage in this case, the strong probability is, that if the case had been left to nature, or treatment of a less decided character employed, such an unhappy result would have occurred, from the fact of two fruitful sources being present: 1st. A patient exhausted in the extreme after a vigorous, tedious labor, followed with alarming hemorrhage. 2d. The entire absence of *post partem* uterine contraction (no doubt resulting from the double cause of exhaustion, and cold applications used to stem fast-ebbing life), with the sequelæ of decomposing uterine coagula, this in course becoming absorbed and quickly firing the train of deadly puerperal typhoid.

The carbo-sulphites bid fair to become the physician's sheet-anchor in zymosis, as Prof. Lister's dressings are to conservative surgery.

ARTICLE XXXVI.

ON THE CONSERVATION OF FORCE IN DISEASE.

By J. E. HENDRICKS, M.D., Des Moines, Iowa.

The investigations of philosophers, during the last 20 years, have placed the doctrine of the *Conservation of Forces* on so firm a basis that its universality may be considered as *demonstrated.* All physiological and pathological conditions may, therefore, safely be attributed to some prior manifestation of *Force.** A definite amount of force, which is ultimately traceable to ethereal vibrations,† results in the construction of animal tissue. This tissue, besides being an *instrument* through which other forces may be manifested, is itself a force, *exactly* equivalent to the force by which it was produced. The admission of the conservation of forces makes this equivalence *absolutely* necessary.

If, therefore, animal tissue disappears during disease, we *know* that either the tissue has been imperfectly disorganized, and yet represents a portion of the force which disappeared on its organization; or its total equivalent has been manifested in some form, if not in its usual form of "psychical and motor" force, then in the form of *heat*, or some other occult form that has escaped our observation.

It is illogical, therefore, to conclude, when animal tissue is

* Force is comprehensible only as a result or consequence of, and coëxistent with, motion. It is either *active* or *potential.* Animal tissue, when not in a state of retrograde metamorphosis, is a representation of *potential* force. The *motion* here is not apparent, but the persistence of force *necessitates* the continuance, even here, of (molecular) motion.

† That heat is a form of force having a definite mechanical equivalent, has been abundantly demonstrated. And it is now pretty generally believed by the more advanced' philosophers, that *heat, light, electricity, magnetism, chemical attraction,* and perhaps *gravitation,* are all "convertible material affections." All these affections, or forms of force, except, perhaps, the latter, are ultimately traceable to *ethereal undulatory motion.* That the latter, or the *attraction of gravitation,* is referable to the same cause, ethereal vibratory motion, although not so obvious, is, nevertheless, highly probable.

disorganized and eliminated in disease without producing the usual amount of mental and motive force, or any observable form of force except *heat*, that the *tissue* was in any respect defective or incapable of conversion, by proper organisms, into a full equivalent of its usual forms of force. To conclude thus, is, in fact, to deny the universality of the conservation of forces.

As the various forms of force manifested by living animal organizations are ultimately traceable, mainly, to that form of force we call heat, the modified forms being the result of organisms, it is, therefore, highly probable, *a priori*, that if those organisms are by any means deranged, the manifestation of force through them would be changed; and, though for a given amount of disintegrated tissue a given amount of force must result, yet in the above supposed condition of the organisms that force may *all* be manifested as heat.

In some diseases, where certain tissues are rapidly dissolved and carried out of the system (as in cholera, for instance), it is probable that but a *partial* retrograde metamorphosis has been effected, and that the tissue, in its dissolved state, contains a considerable portion of the force expended in its organization. This residue of force, in that case, would only be manifested as heat upon *putrefaction* of the fluids after their elimination. It is highly probable, therefore, that in every case of disintegrated tissue, if we could follow it through its successive changes, until complete disorganization is effected, and could measure all the manifestations of force resulting therefrom, we would discover that their *sum* is exactly an equivalent of the force that had been expended in its organization. Any other view of the case is, virtually, a denial of the doctrine of the conservation of forces.

ARTICLE XXXVII.

CLINICAL CASES FROM PRACTICE.

By N. S. DAVIS, M.D., Professor of Practical and Clinical Medicine, in Chicago Medical College.

Vaginismus.—Mrs. H., with her husband, from a distant part of the State, consulted me on the 17th of March, 1868. She stated that she had been married over three years, and, though enjoying fair general health, and feeling the usual sexual desires, had never been able to allow sexual intercourse with her husband, on account of the *terrible* suffering that every attempt had produced.

On attempting to make a vaginal examination with the index finger, it was found necessary to bring her fully under the influence of chloroform before it could be completed. The sphincter at the entrance of the vagina contracted as closely around the finger as the sphincter ani generally does; and without the chloroform, she shrank with terror as the finger separated the labia. Finding no malformation of the parts beyond the entrance of the vagina, except an apparent shortness of the vagina and smallness of the neck of the uterus, she was advised to undergo an operation, such as has been recommended by Dr. J. Marion Sims. This, she and her husband readily assented to; and, on the following day (March 18th), having had the bowels freely moved, so that the rectum should be empty, I proceeded with the operation, assisted by Dr. S. A. McWilliams and two students. The patient was brought into a state of complete anæsthesia by the cautious use of chloroform, and then placed in the same position on the table as for the performance of lithotomy. The labia were separated by the assistants and a portion of the mucous and sub-mucous tissue, corresponding with the original attachments of the hymen, was dissected away with the scissors and forceps, and two incisions were made in the posterior part of the vagina; each commencing about two inches up, one to the right and the other to the left, making them converge into one on the central line poste-

riorly, and then extending as one incision outward to the edge of the perineum. The incisions, when completed, resembled in shape the letter Y, and were deep enough to sever the dense, sub-mucous cellular tissue, and the fibres of the sphincter vagina muscle. The operation was completed by placing a soft sponge in the vagina and removing the patient into her bed. The hemorrhage was inconsiderable, and under the influence of a moderate dose of morphine, the patient rested comfortably for several hours. The next morning the sponge was removed, the vagina washed out with water, a small-sized vaginal dilator inserted, and allowed to remain five minutes. From this time, the dilator was inserted every day during the first week, allowing it to remain from fifteen to thirty minutes. During the second week, one of a larger size was used in the same manner. During the third week, the dilator was introduced only every second day, one of medium size entering the vagina with but little pain or resistance.

On the 15th of April, the treatment was discontinued and the patient permitted to return home. The incisions had entirely healed, and a letter, received from her husband soon after, announced that all serious obstruction to sexual intercourse had been removed. The lady was again in the city, a few days since (Aug. 21st), and assured me that the operation had been entirely successful.

Fissures of the Rectum.—June 6th, 1868, was called to Mrs. L., residing in this city. She was pale, moderately emaciated, nervous system very excitable, appetite impaired, and bowels inclined to constipation. For more than one year she had suffered some from leucorrhœa, and terribly from acute lancinating pain in the anus every time she had a discharge from the bowels. This pain was so acute and protracted after the discharge, that it often induced slight spasms or muscular twitchings, and rendered the patient incapable of leaving her bed for twelve or eighteen hours after each passage. Indeed, the dread of the suffering had induced her to postpone intestinal discharges for eight or ten days at a time.

She had been told, by a previous medical attendant, that the

difficulty was occasioned by a tumor growing in the posterior walls of the uterus or in the recto-vaginal septum. Putting the patient under the influence of chloroform, a careful examination was made, both rectal and vaginal. No tumor was discovered, not even a hemorrhoidal one; but just within the sphincter ani were no less than three well-characterized *fissures*, and a tender, abraded appearance of the mucous membrane over nearly the whole circumference of the anus. An operation for the cure of the fissures was advised and readily assented to.

Accordingly, the following day, the patient was placed on the table, and, after I had put her under the full anæsthetic influence of chloroform, Dr. S. A. McWilliams proceeded to make a free incision through the bottom of each fissure, and, in addition, to stretch, moderately, the fibres of the sphincter ani muscle. The patient was placed in bed, and, as the effects of the anæsthetic passed off, an anodyne was given, sufficient to insure rest for the succeeding few hours. After the first two days the intestinal discharges became regular, and were accompanied by only the slight, smarting pain caused by the incisions. The latter rapidly healed, and there has been no return of the previous suffering. The general health of the patient has also much improved.

The chief object in relating this case, is to illustrate the necessity of making sufficiently careful examinations of patients suffering under chronic maladies, to understand their true nature before the patient suffers months, and sometimes years, from ailments that are easily removed.

Correspondence.

Knoxville, Tenn., July, 1868.

Prof. N. S. Davis:

The readers of the Examiner may be interested in a brief account of this region of country, lying between the Cumberland and Smoky Mountains. This valley is about 80 miles in

width, and 1000, or more, feet above the level of the sea. The Holston river has its origin in South-west Virginia, and, running about midway of the country between the two mountain ranges, unites with other streams to form the Tennessee. This whole region is hilly, but the soil is capable of being tilled to the summits of the elevations. Knoxville is built upon three hills, on the north bank of the river, and between the elevations run two creeks. The drainage is, consequently, most excellent, and but little water can become stagnant.

From the first settlement of this country, in 1792, until 1834, intermittents were said to have been unknown, except upon the river bottoms. From 1834, this form of disease began to prevail, and culminated, in 1838, in an epidemical form, which proved terribly severe and fatal. From a history of this epidemic, before me, it seems to have been of a type similar to that which was so prevalent the same year in many newly settled localities in the North-western States. "Black vomit occurred in some cases, and many considered themselves in the midst of yellow fever." Since that time, no general epidemic has prevailed to any extent.

From an observation of about ten months, there is every reason to believe that this country is as healthy as Eastern New York, or New England. The weather in winter is mild, the mercury seldom going down to zero. Snow seldom falls more than three inches deep, and melts off in a few days. There being no marshes, paludal influences are unknown. A case of ague is scarcely known. The fevers are generally simple in their character, and remittent in their type. Last winter a great many cases of neuralgia occurred, principally located in the supraorbital region, and generally over one eye; the pain was most severe about noon, and subsided towards night; there was no chill on its accession, and but little fever. Mild alteratives, followed by tonics, soon removed the trouble.

Pneumonia prevailed in February and March, but confined principally to the negroes. From the want of proper shelter and nursing, this affection proved fatal in many instances. The blacks are peculiarly liable to pulmonary disease, and the mu-

lattoes are more so than the full-blooded. Scrofula is often met with, but seems confined to families where defective nutrition, resulting from poverty, is the most obvious cause. The class known as "poor whites" are most affected. Phthisis pulmonalis is not often seen, except in cases where the disease is excited by hereditary influences. Asthma is seldom met with, and those who have been afflicted with that distressing disease find marked relief after a short residence here.

The operation of entire removal of the uterus was performed, some years ago, in this place, by the late Dr. Baker. The subject was a negress, laboring for some time under what was considered ovarian disease, and the operation was commenced for the purpose of removing the diseased organ. On proceeding, after the first incision was made, the entire uterus was found involved, and the operator concluded he would extirpate the whole mass. Recovery was rapid, and the woman is still living here in good health. The morbid specimen is still preserved, and in possession of Dr. Boyd, a student of Dr. Baker.

Dr. James Rodgers, of this city, informs me that he himself removed the uterus, in the case of a negress. The tumor was adherent to the rectum, and an opening had formed between the two organs. The removal of the uterus, consequently, left an opening still in the rectum, which was closed by a stitch, with the hope that union might take place. The case went on favorably for five days, and the external incision had partially united by the first intention, when, from a motion from the bowels occurring, the stitch was torn out, the contents escaped into the abdominal cavity, and death occurred as in perforation.

The Tennessee Asylum for the Education of Deaf Mutes is located here, and has, at present, about 50 inmates. The location is a fine one, and the buildings and grounds are in excellent condition.

Some benevolent person donated, a few years ago, a sum of money, for the purpose of establishing a hospital at this place. There is a large lot and some $2000 or $3000 in money now available; and when the State finances will admit, no doubt there will be means appropriated for placing the institution in a way of practical operation.

There are numerous mineral springs in different localities in East Tennessee, and at some points there are accommodations for a large number of visitors.

Previous to the war, the East Tennessee Medical Society was in successful operation. By special charter it had the right to grant diplomas, and included most of the medical men in the whole region. This Society has not been revived since the war, but it is contemplated to take measures at an early day to accomplish its reörganization.

F. K. BAILEY.

Proceedings of Societies.

CLARK COUNTY MEDICAL SOCIETY.

This Association met at the court-house, July 1st. President F. H. Jennings in the chair. Fifteen members present.

Dr. F. R. Payne read a paper on Concentrated Organic Remedies. He recommended the use of aconitin, xanthoxylin, fraserin, prunin, hyoscyamin, and atropin, in many diseases. He contended that these concentrated remedies, when pure articles can be obtained, are more convenient for country practitioners, who not only prescribe, but dispense their remedial agents. They are more convenient than fluid extracts.

Dr. Payne then requested the Society to examine a case of displacement of the crystalline lens, in the eye of a little girl, 12 years of age. Dr. Mitchell presented a case of fatty tumor of the chest. Both of these cases were fully discussed, and appropriate treatment recommended.

Dr. R. L. Payne was then made a member of the Society, and read a paper on Puerperal Convulsions, the treatment of which was then fully discussed.

Dr. McCord was in favor of the free use of chloroform, especially after suspended deglutition. He had never witnessed any bad effects from the use of this remedy, and had used it in many diseases, but regarded it as safe as any other remedial agent.

Dr. Jennings was rather afraid of chloroform, but regarded the lancet as the great remedy in this formidable malady, when used at the proper time; but the remedy must be pushed to syncope.

Dr. F. R. Payne contended that there were two forms of puerperal convulsions—centric and eccentric. In the first of these there is congestion or irritation at the nerve centres; but in the second, the irritation is at the periphery of the nerves. He regarded it as very important that the physician should clearly understand these two forms of this disease, as the treatment must, if rational, strictly conform to the true pathology of the disease. We may have convulsions in a pale, cachectic woman, caused by improper or indigestible food, and in such cases the lancet would be very improper; but in all plethoric, short-necked, full-blooded patients, he regarded the lancet as the sheet-anchor and only hope.

Dr. McCord agreed with Dr. Payne, in his remarks, and regarded this as one of the most formidable diseases of the lying-in chamber; and every physician should thoroughly comprehend its true pathological character.

Dr. F. R. Payne was of the opinion that this disease might be prevented, in a great majority of cases, by proper remedies. He invariably recommended in all primapara cases of full habit, the free use of saline purgatives for two or three months previous to confinement, and has no fear of puerperal convulsions.

Dr. McCord verbally reported a case, where medicines could not be administered internally, and the patient was pronounced beyond the reach of remedies; but by the continued and cautious use of chloroform she recovered.

Dr. Price then read a paper on Indigestion, which was fully discussed and referred to the Publishing Committee. He gave subnit. bismuth, with antacids, zingiberis, and sodæ. This paper entered fully into the etiology and pathology of the disease, and evinced thorough research on the part of the author.

Dr. McCloud read a paper on Hemorrhage, but, at his own request, he was permitted to retain the manuscript, to be completed at the next meeting of the Society.

Dr. Payne then read a paper on Abortion, which was freely discussed by nearly all the members; after which, Dr. Mitchell offered the following resolution, which was unanimously adopted:

Resolved, That a committee of one in each township be appointed, to report, at our next meeting, all cases of abortion in their respective townships, and ascertain, if possible, whether they were *procured* or *accidental*.

In the discussion of this resolution, it was conceded that criminal abortions were fearfully frequent, and that the crime, as a general rule, was committed by irregular practitioners, druggists, and pretended female accoucheurs; and that it was the duty of all true physicians to aid the officers of the law in prosecuting such offenders.

Dr. Steelsmith was proposed as a member of this Society; but, he being a stranger to all present, his case was referred to the Board of Censors.

A case of idiocy was brought before the Society, for examination, by request of the County Board of Supervisors, and the following resolution was unanimously passed, after examination and inquiry in regard to the case:

Resolved, That, having examined John White, one of the County poor, we believe him to be idiotic, yet possessed of slight intelligence, and may be able to learn some useful business if properly instructed.

A long discussion was then had on the duties of the physician, medical ethics, etc.

This meeting was one of unusual interest, and many important subjects were before the Society; many gems of practical experience were produced for mutual benefit; and, we are happy to say, the best of feeling prevailed. We are confident that since the organization of this Society there has been a better feeling prevailing among the physicians of Clark County, and that the people are becoming satisfied that we do not meet for the purpose of combination, thus enabling us to charge "*unreasonable bills*," but that the object is to secure mutual improvement, and thus, by consultation and discussion, better qualify ourselves to successfully combat the diseases of this locality.

F. H. JENNINGS, *Pres't.*

J. A. PATTON, *Sec'y.*

Book Notices.

A Therapeutical and Practical Treatise on Midwifery; Including the Diseases of Pregnancy and Parturition. By P. Cazeaux, Member of the Imperial Academy of Medicine; Adjunct Professor in the Academy of Medicine of Paris; etc., etc., etc. Adopted by the Superior Council of Public Instruction. Revised and Annotated by S. Tarnier, Adjunct Professor in the Faculty of Medicine of Paris, Hospital Surgeon, etc. Fifth American from the Seventh French Edition. By W. R. Bullock, M.D. With One Hundred and Seventy-Five Illustrations. Philadelphia: Lindsay & Blakiston. 1868. For sale by Cobb, Pritchard, & Co., Chicago.

Cazeaux's Midwifery has been so long before the profession, and its merits have been so well appreciated, both in this country and Europe, that comments are unnecessary. The present edition is made more valuable by the notes and additions by Tarnier, and is published in excellent style, with a copious and convenient index.

A Manual on the Extraction of Teeth. Founded on the Anatomy of the Parts Involved in the Operation; the kinds and proper construction of the Instruments to be used; the Accidents liable to occur from the Operation, and the proper Remedies to retrieve such Accidents. By Abraham Robertson, D.D.S., M.D., Author of Prize Essay on Extracting Teeth; Fellow of the N.H. Medical Society, etc., etc., etc. Second Edition. Philadelphia: Lindsay & Blakiston. 1868.

This is an elegantly published duodecimo volume of 200 pages. It will be found very useful to dentists and all physicians who engage in the extraction of teeth.

Dental Materia Medica. Compiled by James W. White. Philadelphia: Sam'l S. White. 1868.

This is a small duodecimo volume of 108 pages, neatly printed and bound; and, from a hasty glance at its contents, we should regard it as a work of real value and convenience to every practical dentist, and not without interest to the physician.

The Anatomy and Histology of the Human Eye. By A. Metz, M.D., Professor of Ophthalmology in Charity Hospital Medical College, Cleveland, Ohio. Philadelphia: Office of Medical and Surgical Reporter. 1868.

This is an octavo volume of 184 pages. The mechanical execution of the work is all that could be required. The paper, type, binding, and illustrations are decidedly good. From a hasty examination, we should say that the author had also executed his task well. His descriptions of the anatomy and histology of all the structures concerned in the organs of vision are clear, concise, and yet full. For the student, it constitutes an excellent text-book; and for the ophthalmologist and general practitioner, a very convenient work for reference.

Half-Yearly Compendium of Medical Science. Part II. July, 1868. Philadelphia: S. W. Butler, M.D., 115 S. 7th St.

This is the second number of the Half-Yearly Compendium of Medical Science. It contains 208 large-sized pages, with a copious index. It contains 420 articles, selected from American and foreign medical periodicals. It is published for $3 per annum, or $2 for a single copy. The numbers are issued in January and July. All those practitioners who are not able to subscribe for more than one or two medical periodicals will find the *Compendium* a very valuable work for reference.

Goff's Combined Day-Book, Ledger, and Daily Register of Patients, for the Use of Physicians.

This is a volume of 328 pages, substantially bound, and so ruled as to fill perfectly all the purposes of a day-book and ledger, with space for memoranda, and a copious index. It presents every man's account for a year, both in detail and aggre-

gate, debit and credit on the same page, ready for examination at all times, without the trouble of handling different books or posting from one to another. The book is admirably arranged to save time and promote convenience in keeping accounts, and we commend it to the attention of the profession.

Editorial.

Medical Colleges in this City.—The next Annual Lecture Term in Rush Medical College commences on the 30th of September. The introductory lecture will be given by Prof. E. Powell.

The next Annual Lecture Term in Chicago Medical College will commence on the 5th of October. The introductory lecture will be given by Prof. N. S. Davis. The laboratory for teaching analytical and practical chemistry in this College is now ready for the reception of students, and Prof. Wheeler informs us that a class is now entering upon its work in that department. The arrangements are very complete, and the instruction in practical chemistry will be as thorough as in the best schools in France and Germany.

Correction.—University of Nashville.—In a previous number of the Examiner, it was stated that "an effort seems to have been made to remove Professors Jennings, Eve, and Jones from their chairs in the Medical Department of the University. They denied the right of the rest of the Faculty to remove them, and appealed to the proper court. A decision has been recently rendered, sustaining their appeal, and enjoining the rest of the Faculty from interfering with them in the performance of their duties in the College." We made the statement from what purported to be the decision of the Judge or Chancellor having the case in charge, and, consequently, had no reason to doubt its correctness.

In the August number of the *Nashville Journal of Medicine*

and Surgery its correctness is denied, and the alleged facts in the case set forth. After stating the facts, however, the editor of that journal adds: "We know that Dr. Davis thought he had authority for his statement, but he knew it was one-sided, and a flat contradiction of its truth was before him which he saw proper to set aside, and he has thus constituted himself an agent for placing before the public a statement false in every particular."

Perhaps Dr. Bowling, in his sanctum in Nashville, may know better than we do what we have before us at any given moment of time here in Chicago; but we doubt it. Now, the truth is, we did make our statement on the *authority* of what purported to be the written decision of a Judge or Chancellor in Nashville. We did *not* know that any such decision was "one-sided." And we did not have before us, at that time, any contradiction of its truth, either *flat* or round. Such contradiction may have existed in a previous number of the *Nashville Journal*, or elsewhere; but if so, we had overlooked it. From the statements in the August number of the *Nashville Journal*, it appears that certain differences had arisen in the Faculty, by which it was claimed that Professors Jennings, Eve, and Jones had, by their own acts, vacated their chairs, and other men were appointed to fill them. The three named appealed to Chancellor Shackleford for an injunction, and it was granted, as we stated in the paragraph to which exceptions have been taken. But Judge Milligan, of the Supreme Court of Tennessee, issued a *supersedeas*, overruling the decision of the Chancellor. This latter part was unknown to us when we penned the former paragraph. And we are happy to end the matter by quoting the following, which is the last authoritative announcement in the *Nashville Journal:*—"Just as we are going to press, we are happy to announce that all suits against the new Faculty are withdrawn, and that there will be no further disturbance."

So may it be!

The Medical Gazette of New York.—This sprightly little sheet had ceased to visit its readers until some of our exchanges

had suggested its death. But its publication has been resumed, and the number for August 22d makes a better appearance than those preceding it.

Honors.—The Royal Medical and Chirurgical Society of London recently conferred the title of Foreign Honorary Fellow on Dr. Samuel D. Gross, of Philadelphia.

Dr. William Marsden, of Quebec, was recently made the recipient of a handsome present, from the citizens of that city, as a testimonial for his services in reference to the cholera.

Bennett Eclectic Medical College.—We have received a circular announcing that a new college with the above title had been organized in this city. The ridiculous manner in which it prostitutes the name of Dr. Bennett, and the customary slanders upon the regular profession, show plainly the character of those engaged in the organization. *Eclectic* Colleges have been tried in Cincinnati and other cities, but with no very flattering degree of success.

Nebraska State Medical Society.—The profession in Nebraska have recently organized a State Medical Society, with the following officers:—President, G. C. Monell, M.D.; Vice-President, N. C. Larsh, M.D.; Corresponding Secretary, G. C. Danise, M.D.; Permanent Secretary, S. D. Mercer, M.D.; Treasurer, D. Whittington, M.D. The next annual meeting is to be held in Nebraska City, on the first Tuesday in June, 1869.

Medical College Changes.—It is said that the Medical Department of Bowdoin College is to be removed to Portland, Maine.

William Warren Greene, M.D., late Professor of Surgery in the Michigan University, has taken up his residence in Portland, Maine.

Profs. Austin Flint, Senior and Junior, and Foster Swift, have resigned their places in the Long Island College Hospital.

New Sydenham Society's Publications.—Messrs. Lindsay & Blakiston, of Philadelphia, are the agents in this country for the sale of the publications of this Society. The subscription price for 1868 is ten dollars in currency.

Medical Department of University of Michigan.—The troubles in the Medical Department of this University are said to have been fully and satisfactorily settled.

Money Receipts to Aug. 28th.—Drs. Aug. Rhoads, $3: A. E. Van Deventer, 3; Wm. B. Hart, 3; John Sharp, 3; J. Guinan, 3; J. W. Duncan, 3; C. R. Parke, 3; P. S. Macdonald, 3; — Griffen, 1.50; L. T. Hewins, 5; R. S. Addison, 3.

COOK COUNTY HOSPITAL, CITY OF CHICAGO.

WINTER TERM OF CLINICAL INSTRUCTION, 1868–69.

The regular course of clinical lectures in this institution will commence on Friday, Oct. 2d, and continue for *nine months.*

The prosperity of this great public hospital, liberally supplied with the most adequate means for clinical and practical instruction, affords an extensive field for the study of every form of medical, surgical, and special disease.

During the year ending July 31st, 1868, over 1100 patients were treated in this hospital, and upwards of 100 important surgical operations were performed. In the Lying-in Department, there were 98 births.

The large number of autopsies—usually made in presence of the class—together with the pathological museum, gives an excellent opportunity for the study of morbid anatomy. The Dispensary, for out-patients, is organized to so classify diseases that every patient shall receive the most thorough attention. This, alone, furnishes a large number of interesting cases.

Lectures will be delivered as follows: Surgical Clinics, with operations, and Medical Clinics, with examinations at the bedside, on Tuesdays and Fridays; Eye and Ear Clinics, with operations, and Clinic on Diseases of Women and Children, on Saturdays. Commencing invariably at 1½ o'clock P.M., and continuing two hours.

It is the purpose of the medical staff to use and develop the immense resources of this institution, for the promotion of medical education; and to add whatever is possible to the means and facilities for medical study attainable in Chicago—the object for which they will labor being an exalted standard of professional knowledge among the students and such junior practitioners as may seek our city for this purpose.

Fee for admission to the Hospital, $5. Graduate practitioners free.

LECTURES ON THE EYE AND EAR.

In addition to the course of lectures and operations on the Eye and Ear, embraced in the regular term of clinical instruction at the County Hospital, Chicago, Dr. Hildreth will also deliver a *Special Course* on these organs.

The theory of the ophthalmoscope; the analysis and treatment of "accommodation," astigmatism, and other optical and mechanical defects of the eye, will be fully dwelt upon. The methods of exploring the ear will be fully demonstrated.

The number of interesting cases in the Eye and Ear Wards of the hospital insures abundant opportunity for becoming familiar with ophthalmic and aural disease.

THE CHARITABLE EYE AND EAR CLINIC,

A Free Dispensary, established by prominent citizens of Chicago, is likewise accessible to students.

The Hospital Ticket admits, without further charge, to all of the above.

Treatment of Diseases of the Heart.—Dr. S. O. Habershon, Physician to Guy's Hospital (Guy's Hospital Reports, 1867), lays down seven principles of treatment for diseases of the heart: 1st, to lessen its work; 2d, to insure regularity of action in avoiding all excitement; 3rd, to lessen the distention of the right heart by purgatives, diuretics, etc.; 4th, to prevent syncope attendant upon exhaustion; 5th, to strengthen the fibres of the heart by suitable out-door exercise; 6th, to prevent fibrillation of the blood by suitable remedies, for instance, carbonate of ammonia; and 7th, to prevent secondary complications, such as pneumonia, pleuritic effusion, etc.

Mortality Report for the Month of July:—

CAUSES OF DEATH.

Abscess,	1	" chronic,	6	Intestines, inflammation of	1
Accident, drowned	16	" & convulsions	5	" injuries of	1
" by engine,	1	Dropsy,	2	Jaundice,	1
" fall,	2	Dysentery,	17	Kidneys, Right's disease of	1
" horse kick,	1	" chronic,	1	Leg, tumor of	1
" poisoning,	1	" complicated with pneumonia,	1	Lightning, struck by	3
" railroad,	2	" & teething,	1	Liver and kidneys fatty degeneration of	1
" revolver,	1	Endocarditis,	1	Liver, cirrhosis of	1
" scalding,	1	Enteritis,	4	" inflammation of	1
Anæsarca,	1	" complicated with meningitis,	2	Lungs, congestion of	1
" and diarrhœa	1	Enteritis, complicated cholera infantum,	1	" " of at childbirth,	1
Apoplexy,	10	Encephatitis,	5	" congestion of and measles,	1
Apthia and diarrhœa,	1	Enterocolites	3	Meningitis	15
Apoplexy, from over-exertion and heat,	1	Epistaxis,	1	" acute,	1
Ascitis, abdominal,	1	Epilepsy	2	" foll. diarrhœa	
Atelectasis pulmonium,	1	" superinduced by heat,	1	", cerebro spinal,	8
Births, premature,	11	Erysipelas,	1	" tubercular,	4
" still,	37	" foll. measles,	1	Mania, puerperal	1
tedious,	2	" traumatic,	1	Manslaughter,	1
Bowels, congestion of, and abortion,	1	Exhaustion from exure,	2	Measles,	7
" inflammation,	8	Fever, congestive,	2	Metrophibitis, purperal,	1
" perforation,	1	" " and diarrhœa,	1	Miliaria puperanum, retroception of	1
" ulceration of,	1	" puerperal,	4	Mouth, canker sore of	1
Brain, congestion of,	6	" scarlet,	11	Myetitis, acute	1
" disease of,	2	" " and diptheria,	1	Nutrition, defective	1
" inflammation	9	" typhoid,	9	Œdema glottde,	1
" tubercular disease	1	" and gastromalaxy,	1	Old age,	4
Catarrh,	2	Gastritis	1	" and debility,	3
Cholera infantum,	273	" and intemperance,	1	" " paralysis,	1
" convulsions,	8	Gastroenteritis,	1	Palate, fissure of,	1
" dysentery,	1	Hepatitis,	1	Paralysis,	3
" foll. measles,	1	Heart, disease of	2	Parotitis,	1
Cholerine,	1	" dropsy of	1	Paralysis and old age,	1
Cholera infantum and phrenitis,	1	" organic disease	2	Pericarditis	1
Childbirth, hemorrhage from,	1	" hypertrophy of	1	Periostitis of inferior maxillary,	1
Cholera morbus,	7	" valvular disease	2	Pistolshot through abdomen,	1
Childbirth	1	Hemorrhage, internal,	1	Pleuritis, double, and emboli in heart,	1
Convulsions,	74	Hernia, strangulated	2	Poisoned wound from snake bite,	1
" puerperal,	2	Hydrocephalus	10	Phthisis, acute,	1
" sunstroke,	1	" acute	7	" pulmonalis,	32
" urasmic,	1	Intemperance and exposure,	2	" " & abortion,	1
" teething,	15	Idigestion,	1	Pyæmia,	1
Croup,	3	Inanition,	9		
Cyanosis,	1	Ileus,	1		
Debility,	8				
" and old age,	1				
Delirium tremens,	6				
Diphtheria,	2				
Diabetes milletus,	1				
Diarrhœa,	34				

Pneumonia,	17	Sunstroke,	19	Uræmia,	2
" complicated with measles,	3	Small-pox,	2	Uterus, cancer of,	1
" typhoid,	3	Stomach, congestion of	1	" hemorrhage of,	1
" and inflammation of bowels,	1	Stomatitis,	2	Whooping cough,	6
Rheumatism, inflammatory,	1	Tabes mesenterica,	19	" " & convulsions,	3
Scrofula,	2	Tetanous traumaticus,	1	Whooping cough and diarrhœa,	4
Septæmia,	1	Teething,	27	Unknown,	1
Suicide,	4	" and diarrhœa,	5		
		" and meningitis,	1		
		Tumor, abdominal,	1		
		" ovarian,	3	Total	896

COMPARISON.

Deaths in July, 1868, 896 | Deaths in July, 1867, 597 | Increase, 299

Deaths in June, 1868, 305 | Increase, 591

AGES.

Under 5	654	40 to 50	40	90 to 100	0
5 to 10	27	50 to 60	21	100 to 110	0
10 to 20	24	60 to 70	15	Unknown	2
20 to 30	45	70 to 80	11		
30 to 40	54	80 to 90	0	Total	896

Males, 510 | Females, 385 | Total, 896

Single, 765 | Married, 131 | Total, 896

White, 891 | Colored, 5 | Total, 896

NATIVITY.

Chicago	555	England	13	Scotland	5
Other parts U. S.	92	Germany	110	Sweden	26
Austria,	2	Holland	2	Switzerland	1
Bohemia	5	Ireland	49	Unknown	5
Canada	8	Norway	16		
Denmark	1	Poland	4	Total	896
France,	1	Atlantic Ocean,	1		

MORTALITY BY WARDS FOR THE MONTH.

Ward.	Mortality.	Pop. in 1868.	One death in		Ward.	Mortality.	Pop. in 1868.	One death in	
1	10	11,991	1,199	1-10	14	63	14,168	224	6-7
2	19	13,739	723	1-9	15	65	20,429	314	2-7
3	43	16,620	386	1-2	16	31	16,011	519	2-3
4	42	16,499	392	4-5	Bridewell,	2			
5	36	13,434	373	1-6	County hosp.	19			
6	50	12,507	250	1-7	Chi. River,	3			
7	88	21,957	249	1-9	Mercy Hosp.	2			
8	59	14,003	237	1-3	Yard of R. I.				
9	57	18,050	234	1-5	Railroad,	1			
10	28	13,644	487	2-5	Soldier's hom.	1	St. Joseph's Orph. As.		6
11	50	13,317	266	1-3	Marine hos.	1	Home for Friendless,		2
12	105	14,739	141	1-3	Orphan asyl.	1	Immigrants,		56
13	49	11,113	226	4-5	Lake Michi.	7	Police Stat. 12 St.,		1

Total, 896

Druggists Renewing Prescriptions.—The Academy of Medicine, New York, after a long and impartial discussion of the various points at issue, adopted unanimously the following preamble and resolution, and referred them to the State Medical Society:

Whereas, The attention of this Academy has been called to the repetition of prescriptions, containing active ingredients, by druggists, without the written order of physicians; and whereas, serious consequences to patients are liable to ensue; therefore,

Resolved, That we respectfully request the druggists of this city not to repeat such a prescription without the written order of the physician, he being the only competent judge of the propriety or necessity of such renewal.

Uterine Injections.—At a recent meeting of the Imperial Academy of Medicine, the subject of uterine injections, which of late has occupied the attention of that learned body, was again briefly discussed, and MM. Gosselin, Depaul, and Ricord condemned this method of therapeutics, which, despite the perfection of the instruments adopted, may determine an attack of metro-peritonitis, which, according to the declaration of M. Gosselin, has already occurred in the service of M. Jobert.—*L'Evenement Medicale.*

Musical Bullet Probe.—At the Paris Exposition there was exhibited a probe for announcing audibly the presence of a bullet in a wound. If the points of the instrument came in contact with a metallic body, an electrical circuit was made and a small bell rang.

An ozone generator was also exhibited, made of flat plates of glass coated with tin foil and electrified by a Ruhmkoff coil. A stream of air driven through the apparatus came out so highly charged with ozone as to be irrespirable, and possessing the power of bleaching paper, linen, soiled engravings, and so forth. This discovery is spoken of as likely to be of much practical value in the arts.—*Pacific Medical and Surgical Journal.*

Gossypium as an Emmenagogue and Parturifacient.—Dr. Bellamy, of Columbus, Ga., says of the common cotton-plant, gossypium (*Atlanta Med. and Surg. Journal*):—"I am fully satisfied, from the experiments and impartial tests I have given the remedy, that it is fully equal, if not superior, to ergot in promoting the various functions of the uterine organs. I look upon it as a sure, speedy, and safe remedy, not only for

difficult, painful, contracted labors, but also to control all the irregularities of females, and to alleviate their peculiar monthly sufferings. It is very certain that its effects are so powerful upon the uterine system as to produce miscarriage, if administered during pregnancy. I feel that its merits cannot be too highly extolled, and deem it too valuable a remedy to remain hidden in the depths of obscurity. I consider it preferable to ergot. The proper time to gather the root is when it is as old as possible, without being injured by the severe frosts: therefore, it is best when gathered during the months of October and November."

Deaths from Sunstroke.—An examination of the statistics of death from sunstroke in the city of New York, gives the following exhibit: In August, 1853, 224 persons died from sunstroke; in 1863, there were 135 deaths from sunstroke, and during the present year up to Saturday, the 18th ult., there were no less than 883 deaths from heat alone, as reported by the papers.—*Ex.*

An Alleged Preservative against the Cattle Plague. —Chloride of copper is now extensively used in Germany against the cattle plague, or rather as a preservative. The *modus eperandi* is as follows:—

Take green crystallized chloride of copper, eight gram., spirits of wine, two kilog., and dissolve. With this solution impregnate a pad of cotton, lay it on a plate, and set fire to it in the centre of the stable, turning the animals' heads towards the flame, so as to make them breathe the fumes. This operation is performed morning and evening, burning one pad for every three heads of cattle. At night, a spirit-lamp filled with this solution is lighted in the stable. To prevent accidents, the flame is surrounded with wire gauze. The liquid is also administered internally, with the addition of fifteen gram. of chloroform for the above quantity. A teaspoonful of this is put into the animals' drink three times a day. As a further precaution, the litters are watered with the same solution.

Effect of Digitalis on the Mind.—It is a popular opinion that digitalis acts injuriously upon the *memory*, and that it hastens childishness in elderly persons. Undoubtedly it has a peculiar and specific influence on the mind, probably through its remarkable power over the circulatory system. It has recently been used in Germany with success in the treatment of

hallucinations. In the *Allg. Ztschr. fur Psychiatrie* a case of a woman is reported, aged 38 years, who was constantly troubled with the appearance of devils and imps, brandishing flames and threatening to strangle her. She was placed on digitalis (℈ss., aquæ ℥v., ℥j. t. d.), and in two or three months was quite restored.

The real effects of the drug on mental action should be carefully studied.

BELLEVUE HOSPITAL MEDICAL COLLEGE,

CITY OF NEW YORK.

SESSION OF 1868-'69.

FACULTY.

ISAAC E. TAYLOR, M.D., Emeritus Prof. of Obstetrics and Diseases of Women and Children, and President of the College.

JAMES R. WOOD, M.D., LL.D., Emeritus Prof. of Surgery.

FRANK H. HAMILTON, M.D., Prof. of Practice of Surgery with Operations.

LEWIS A. SAYRE, M.D., Prof. of Orthopedic Surgery.

ALEXANDER B. MOTT, M.D., Prof. of Surgical Anatomy with Operations.

W. H. VAN BUREN, M.D., Prof. of Principles of Surgery with Diseases of the Genito-Urinary System.

BENJAMIN W. McCREADY, M.D., Prof. of Materia Medica and Therapeutics.

GEORGE T. ELLIOT, M.D., Prof. of Obstetrics and Diseases of Women and Children.

FORDYCE BARKER, M.D., Prof. of Obstetrics and Diseases of Women and Children.

STEPHEN SMITH, M.D., Prof. of Descriptive and Comparative Anatomy.

AUSTIN FLINT, M.D., Prof. of Principles and Practice of Medicine.

R. OGDEN DOREMUS, M.D., Prof. of Chemistry and Toxicology.

WILLIAM A. HAMMOND, M.D., Prof. of Diseases of the Mind and Nervous System.

AUSTIN FLINT, Jr., M.D., Prof. of Physiology and Microscopy, and Secretary of the Faculty.

The Preliminary Term will open on Wednesday, September 16, 1868, and will continue until the opening of the Regular Session, October 14, 1868. A distinctive feature in the method of Instruction in this College is the union of Clinical and Didactic Teaching, and all the Lectures are given within the Hospital Grounds.

FEES FOR THE REGULAR SESSION.

Fees for Tickets to all the Lectures during the Preliminary and Regular Term, including Clinical Lectures,	$140 00
Matriculation Fee,	5 00
Demonstrator's Ticket (including material for dissection),	10 00
Graduation Fee,	30 00

For the Annual Circular and Catalogue, giving regulations for graduation and other information, address the Secretary of the College, Prof. Austin Flint, Jr., Bellevue Hospital Medical College.

CHICAGO MEDICAL COLLEGE.

The regular Annual Lecture Term in this Institution will commence on the first Monday in October, and continue until the fourth Tuesday in March following. Clinical Lectures *daily* throughout the term.

FACULTY.

N. S. DAVIS, M.D., Pres't of Faculty, 166 State Street,
Professor of Principles and Practice of Medicine and of Clinical Medicine.

W. H. BYFORD, M.D., Treas. of Faculty, 62 State St.,
Professor of Obstetrics and Diseases of Women and Children.

EDMUND ANDREWS, M.D., Sec'y of Faculty,
81 Monroe Street,
Professor of Principles and Practice of Surgery and of Military Surgery.

H. A. JOHNSON, M.D., 611 Wabash Avenue,
Professor of Diseases of Respiratory and Circulatory Organs.

C. GILBERT WHEELER, B.S.,
Professor of Organic Chemistry and Toxicology.

RALPH N. ISHAM, M.D., 47 Clark Street,
Professor of Surgical Anatomy and Operations of Surgery.

J. H. HOLLISTER, M.D., 30 Washington Street,
Professor of General Pathology and Pathological Anatomy.

THOMAS BEVAN, M.D., 81 Monroe Street,
Professor of Public Hygiene.

R. J. PATTERSON, M.D.,
Professor of Medical Jurisprudence.

J. S. JEWELL, M.D.,
Professor of Descriptive Anatomy

DANIEL T. NELSON, M.D., 169 Dearborn Street,
Professor of Physiology and Histology.

M. O. HEYDOCK, M.D., 92 Dearborn Street,
Professor of Materia Medica and Therapeutics.

C. GILBERT WHEELER, B.S.,
Professor of Inorganic Chemistry.

E. O. F. ROLER, M.D., 62 State Street,
Adjunct Professor of Obstetrics.

J. M. WOODWORTH, M.D., Lombard Block,
Demonstrator of Anatomy.

S. A. McWILLIAMS, M.D., 166 State Street,
Assistant to Professor of Anatomy.

JULIEN S. SHERMAN, M.D.,
Curator of the Museum.

NORMAN BRIDGE, M.D.,
Assistant to the Demonstrator of Anatomy.

FEES.

For the Winter Term, admitting to all the Lectures in the College,	$50.00
Graduation Fee,	20.00
Matriculation Fee,	5.00
Dissecting Ticket,	5.00
Hospital Ticket,	6.00

The Summer Reading and Clinical Term commences on the first Monday in April, and continues until the first Monday in July; and is free to all matriculated Students of the College. Boarding, $3.50 to $4.50 per week. For further information, address

E. ANDREWS, M.D., *Sec'y of the Faculty.*

THE

CHICAGO MEDICAL EXAMINER.

N. S. DAVIS, M.D., Editor.

VOL. IX. OCTOBER, 1868. NO. 10.

Original Contributions.

ARTICLE XXXVIII.

TWO EXTRAORDINARY FORMS OF RECTAL FISTULA.

By E. ANDREWS, M.D., Prof. of Principles and Practice of Surgery, Chicago Medical College.

I occasionally find practitioners of great general skill completely puzzled and confounded by the occurrence of unusual forms of intestinal fistula. The following examples are instructive in this connection:—

Case 1.—Annie B., æt. 12 years, was placed under my charge in the third stage of hip-disease. As she seemed likely to die of the irritation and suppuration, I exsected the carious head of the femur. This operation greatly improved her condition, so that she shortly began to recover flesh and strength.

At one of my visits, the mother stated to me that the child passed air from the intestines through the wound. Though rather incredulous on the subject, I tested the matter by injecting the rectum full of tepid water, when I found that it flowed out in a small but continuous stream from the incision by the trochanter. By making pressure at various places near the anus, I discovered a point where the fistulous canal crossed the tuberosity of the ischium, and where the touch of the finger would stop the flow of water from the wound. Taking a scal-

pel, I cut down upon this point, opened the fistula, and found that the water flowed freely out. Passing a probe along its track, towards the anus, I cut down again upon it, at a point pretty near the verge. Inserting the probe again at this point, I had no difficulty in following the sinus into the rectum, and effected a cure by cutting the sphincter in the usual manner.

Case 2.—Mrs. F. had an old femoral hernia, which at one time had terminated in an artificial anus in the groin, but had subsequently healed. I was some years afterwards called in for a new trouble. The whole circumference, almost, of the left hip was chronically swollen, and very tender. There was severe pain along the sciatic nerve, and great exhaustion and emaciation, which, unless relieved, was plainly destined to end in her death. On examination, the inflammation did not appear to be connected with the joint. The swelling fluctuated under the finger, and gave a distinct succussion upon coughing. Its entire circumference was resonant upon percussion, and pressure caused a gurgling noise, which proved the existence of air in the whole gluteal region, and also in the external part of the groin.

The case perplexed all who saw it, but was generally believed to be a hernia through the sciatic notch. On examination, I was dissatisfied with this explanation, because the tumor had no definite outline, like a true hernia, as well as because it was too tender, and quite irreducible. On inquiry, I found that the patient passed a considerable quantity of pus every day at stool, with some blood. Following up this hint, I injected the rectum full of air, and found that in this way I could easily fill up and distend the tumor, showing the connection between them.

With the concurrence of Dr. Ernz Schmidt, whose views coincided with mine, I determined to operate. The patient being placed under the influence of ether, I made an incision about half way between the trochanter and the border of the sacrum, down to the gluteus maximus muscle. Next carefully dividing the muscular tissue, as if coming down upon a hernial sac, I opened the cavity. There was no intestine present, but a

large cavity, from which rushed a quantity of fetid gas, followed by some pus mingled with decayed fecal matter. Upon injecting the rectum full of tepid water, the fluid ran freely out of the wound. Bearing in mind the course of the fistula in the previous case, I carefully sought along the ischium and all adjacent parts for some point where pressure would stop the flow of water, but in vain; after a full exploration, it became evident that the sinus had a deeper course. Next passing a probe into the cavity, the fistula was found to run through the sciatic notch, above the greater ligament, and its opening, large enough to admit the point of the finger, could be felt on the side of the rectum by exploring that viscus. As there are too many important organs occupying the notch to allow of the enormous cut which would be required to open down to the anus, as in ordinary fistulas, it became necessary to devise other measures.

So far as I know, there is no published authority for a surgeon's guidance in such a case, and therefore it was requisite to act on general principles. I first enlarged the external incision towards the notch, so as to give as straight and short a fistula as possible, thus preventing the vast sac-like cavity from being any more distended, and giving it an opportunity to collapse and heal down as far as the edge of the incision. The next step was to introduce the index finger into the rectum, and grasping the sphincters between it and the thumb, to cut them through at one stroke. The retaining power of the anus being thus temporarily destroyed, I hoped that the contents of the rectum would pass straight downward, and give an opportunity for the fistula above to close.

The result surpassed my expectations. For a few days the sac continued to discharge its accumulation of old fæces, after which it sent forth clean pus, with occasionally a little flatus from the fistula. The sac collapsed, granulated rapidly, and was obliterated; the pain of the sciatic nerve ceased; the patient began to grow strong and fat, and in every way to present a striking improvement. At present, the fistula is almost entirely closed, but has occasionally bubbled out a little air.

It is contracting so rapidly that it seems likely to become completely obliterated without further interference. The patient is walking about, and even going out on visits, and is entirely freed from the danger which a few weeks ago threatened her life.

ARTICLE XXXIX.

ANCHYLOSIS OF THE KNEE.

By J. S. SHERMAN, M.D., Chicago.

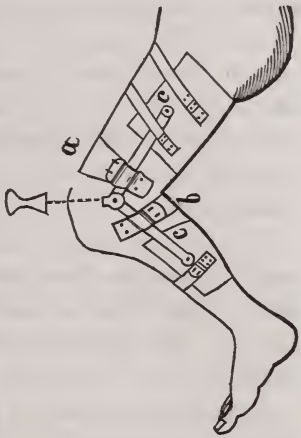
Of all deformities resulting from diseases of joints, none yield quicker, or show better results from treatment, than those of the knee. Its position is such that mechanical force can be used to great advantage.

Yet failures to completely straighten these limbs are not uncommon results, and they are generally due to two causes: First, the force used to extend them is not sufficient; second, the relative position of the bones is not recognized. If we flex the knee, the tibia is carried backward upon the posterior portion of the articulating surface of the femur, and in order to extend it, and restore its position to a straight line, we must not only extend, but bring the head of the bone forward. It is from failure to accomplish this that deformity of the knee remains after the foot has been brought to the ground; and the joint presents the appearance of a partial dislocation backwards.

The ligaments at the posterior part of the joint are not sufficiently elongated to allow the tibia to resume its natural position upon the femur. The latter, therefore, with the patella, project beyond the spine of the tibia.

If the anchylosis is of a character justifying immediate extension, the limb may be brought down by forcibly rupturing the ligaments. If the slow method is preferred, the apparatus figured will be found most satisfactory in its action. It is capable of all the power produced by the old method of extension by means of a rod and screw. It distributes the pressure

evenly upon the thigh and calf, and with it the limb can be carried beyond a straight line, which is often absolutely necessary to prevent future contraction. Its force has a double bearing—bringing the tibia forward as well as extending it.



The construction is simple, and, applied as represented in the cut, its action is efficient. Two pieces of sheet-iron, bent to fit the thigh and calf, are connected on the sides by a steel bar, provided with a ratchet opposite the knee-joint, and attached at the points (*c*, *c*) with a *movable* rivet, so that their motion in straightening the limb does not change the position of the sheet-iron plates, but allows them still to keep perfectly in contact with the limb. Two strong elastic bands (*a*, *b*) are buckled to the side-rods; one passing over the femur, and drawing it backward; the other behind the tibia, forcing it forward. Extension is made by means of the ratchet at the knee. The bringing forward of the tibia may be accomplished by putting the patient to bed, enclosing the leg in a plaster bandage, and applying the force by means of a pulley and weight. But the majority of these patients are able to get about with crutches, and confinement to bed should be avoided, if possible.

ARTICLE XL.

RUPTURE OF THE WOMB—RECOVERY.

REPORTED BY S. A. McWILLIAMS, A.M., M.D., Chicago.

Dr. David B. Taylor, Milbourne, Lake Co., Ill., was called May 27, 1868, about 9 A.M., to attend Mrs. Hinkle, a farmer's wife, living one mile distant, in her eighth confinement, at full term. All her previous labors, except the last, were severe.

The lady is of German birth, 40 years old; has given birth twice to twins, and has now five children living.

Upon examination, the Doctor found the os uteri about an inch dilated, and the head presenting. The liquor amnii had escaped about three hours previously. The pains continued light, until 2 P.M., when the os was sufficiently dilated to permit the use of instruments. A severe pain occurred about this time, which caused some progress; in five minutes, a similar one, and soon another, which promised to be still stronger, but suddenly began to die away, while the head gradually receded, and flowing commenced.

The Doctor, satisfied that a rupture had taken place, turned and delivered the head with instruments, unable to do so otherwise. The child—a male—was dead when born, and weighed 8½ lbs. The placenta was found detached, and delivered at once.

A further examination revealed a rupture to the right of the median line, through which the Doctor readily passed his hand, and removed a couple of handfuls of blood, when the womb began to contract rapidly. The woman, being now threatened with syncope, was given three 2-dr. doses of brandy every eight minutes. A Dover's powder being now given, she was allowed to rest 2½ hours. Reaction commenced—pulse 100 per minute. A powder of 3 grs. calomel and ½ gr. opium was ordered to be given every two hours; also, 2 dr. nitrate of potash, to be dissolved in half a tumbler of water, of which a dr. was to be given every hour. During the night, tympanitis set in, became very severe, and lasted about three weeks, subsiding gradually with the diarrhœa. A mush poultice was kept on bowels for the first ten days, when an eruption of vesicles appeared on abdomen.

May 28, 8 A.M.—Pulse 125. Continued solution of potash, and ordered 5 gr. calomel and 1 gr. opium every two hours.

8 P.M.—Omitted solution of potash, and gave 10 gtts. *til. ex.* gelseminum every four hours for forty-eight.

29th, 8 A.M.—Pulse 140. Gave 10 grs. calomel, 1½ gr. opium every three hours for six days, when bowels were moved with an injection of soap-suds.

June 5th.—Pulse 150. Bowels moved about eight times daily for the ensuing week, then gradually improved, and she vomited occasionally during the next three weeks.

Previous remedies omitted. 3 gtts. nitro-muriatic acid given every four hours for thirty-six, and $\frac{1}{3}$ gr. nitrate of silver in solution every four hours.

6th.—Lochial discharge now occurred, for the first time.

After two weeks, a pill of 2 gr. quinia and 1 gr. precipitated carbonate of iron were given every four hours for four or five days, when tympanitis had nearly subsided.

After which, 15 gtts. tr. fierri chlor. and 2 gr. chlorate potass, in syrup, were given four times daily.

The diet consisted mainly of crust, coffee, barley and rice water, for the first two weeks; after which she was able to take bland articles of nourishment.

July 28.—The woman is around, attending to her ordinary household duties.

ARTICLE XLI.

BROMIDE OF AMMONIUM IN DYSMENORRHŒA.

By A. A. DUNN, M.D., Chicago, Ill.

June 10th, 1867, an unmarried lady, aged 32 years, consulted me about her painful monthly periods. She is short, quite plump, without much of the adipose, bowels regular, general health good, cheeks ruddy.

Her mother states that, from her earliest menstrual period down to the date just given, the young lady has had but few occasions of comparative comfort during her "turns." Pain in great severity behind the pubes, in the groins, in the lumbar and sacral regions, in the right leg, in the head, accompanied by flushed face and frequently with febrile movement, ensued nearly always at each return of her courses, which were very regular as to time of return, duration, quality and quantity of flow. The discomfort would commence with the ovarian and uterine engorgement, reach its maximum in from 36 to 60

hours, subsiding after the appearance of the catamenia in full flow.

No attempt at radical relief was made during those long years, so far as I could learn. Occasionally, a physician was called in to afford relief temporarily, during a more than usually severe paroxysm of pain.

She consulted me just after the cessation of an ovarian evolution. I prescribed am. brom. ℥ss., aquæ ℥iv., a tablespoonful of which was to be taken in half tumbler of water three times a day. At the return of the menstrual period, if the bowels were at all inactive, directed an effervescing purgative to be taken. If, as usual, pain was established, she was to inject into the vagina a gallon or two of water, more than blood warm, three or four times a day. As she was a good liver, I abated somewhat the more stimulating articles of diet in which she was prone to indulge, but by no means restricted her to *low diet;* and what restriction I did place upon her, was more particularly directed to the period a week prior to and during the catamenial effort.

The next ensuing period was passed in almost absolute comfort; and so of the second, third, and fourth, when the quantity of medicine was reduced one-half. The fifth period passing with equal comfort, the medicine was suspended, and the sixth period came and went with as little discomfort to the patient as any of the previous five. Such continued to be the case down to last period, recently passed, when, after partaking freely of ice-cream, and, immediately after, bathing in the ocean, the catamenial flow came on, anticipating the usual period four days, and was accompanied by no inconsiderable amount of distress, though by no means so violent as was usual prior to the exhibition of the bromide. Neither the injection nor purgative was resorted to on a single occasion, as the requirements did not exist. The medicine affected the appetite unfavorably not at all, so far as I have been able to learn, and certainly did not during the three months she was immediately under my eye. The urine was not subjected to chemical analysis, and I may say here, she has never complained of ardor urinæ before or

since taking the bromide. The pulse maintained its usual force and frequency while the patient was where I could observe her condition.

In this case there was evident benefit derived from the use of the medicine, or, there was a strikingly marked coincidence between the commencing and progressive improvement of the patient, and the use of the compound. The results in this case cannot be considered conclusive as to any effect whatever of the medicine exhibited; but, placed in the category of the results following its exhibition in similar cases, they may contribute somewhat towards reaching sound conclusions as to the therapeutic effect to be expected from the use of the drug.

Sedation is the effect claimed for the article under consideration. My observations have not led me to attribute to it any such effect upon the circulation. If we must consider it a nervous sedative, then it belongs to that class of medicines known as anodynes, or to that other class which allays perturbation so common to hysterical conditions, and which are denominated nervous stimulants. Among possible things, the drug may have a *peculiar* effect upon the nerve-tissue, not now understood, differing from that of our anodynes proper, and from the list of nervous stimulants. Neither my experience nor my reading warrants a positive opinion on this point.

ARTICLE XLII.

NEW RECTUM BOUGIE.

BY J. S. SHERMAN, M.D., Chicago.

A bougie is often required which can be passed up the rectum into the sigmoid flexure. The ordinary rectal bougies are too stiff to accommodate themselves to the course of the bowel, while the more flexible double upon themselves before sufficient pressure is used to open the upper sphincter. A bougie should be flexible enough to bend to the hollow of the sacrum and curve of the bowel, and at the same time sufficiently rigid to force its way without coiling.

Lead is a substance possessing such properties, and from this metal I have constructed a bougie in the following manner:

Have a lead rod drawn out the required length, and a little less than one-third of an inch in diameter. This is introduced into an elastic catheter, or piece of rubber tubing. This covering is necessary, as lead, from frequent bending, is liable to break; and, if not thus enclosed, there would be danger of losing portions in the rectum.

A piece of hard rubber or wood, turned in an oval shape, and attached to the bougie with a rivet, completes the instrument. Various sizes of these may be turned, and used on the same lead rod. For exploring the rectum high up, such an instrument will be found very useful. It may be made hollow, and used for injecting the bowel in cases of intussusception.

ARTICLE XLIII.

FIRST SEMI-ANNUAL REPORT OF THE JACKSONVILLE SURGICAL INFIRMARY.

OFFICERS IN IMMEDIATE CHARGE OF THE INSTITUTION.

DAVID PRINCE, M.D., Proprietor and Attending Surgeon.
WM. H. H. KING, M.D., Resident Surgeon.
MISS M. A. BOSWORTH, Matron.
MRS. AGNES W. HILL, Chief of Subsistence.

In accordance with an announcement issued last fall, this enterprise went into operation about the beginning of the present year, and while its success has been encouraging to its managers, it is believed to have been satisfactory to all who have sought the benefits which it was designed to bestow.

It is easily understood that those who go away from home for medical treatment and operations, receive the benefit which they seek at a disadvantage, if forced to board around wherever a vacancy may be found. They can only be seen by their medical advisers by special visits, while in an institution, a more frequent examination of the case is practicable and all the appliances to be used in the treatment are at hand.

Besides, it is practicable to keep on hand and to employ various apparatus which it would be inconvenient to set up in private houses and to move about from place to place.

It is also practicable to secure more skilled and efficient nursing, in an institution conducted for the purpose of caring for the sick and the disabled, than is possible under other circumstances.

Another feature which secures special advantages for the winter season, is the warming of the house by furnaces in the basement, so that a pleasant and equable temperature is secured at the same time that a considerable degree of ventilation, always desirable, is rendered unavoidable. The colder the weather is, the greater the amount of heated air introduced from without through the furnace chambers. This of course displaces so much air already in the room, which escapes by the openings, whether windows, doors and cracks, or openings specially provided. An arrangement is also made, by which all impurities can be taken out of the incoming atmosphere, so that the air introduced into the rooms through the furnace is purer than the outside atmosphere. On the contrary, where stoves are employed, the colder the weather is the worse the ventilation on account of the temptation to stop all the cracks through which the cold air strives to enter the room.

There is, at the same time, a temptation to build as few fires as possible, so that in going from one room to another, there is the danger and discomfort of passing through cold or variously heated atmospheres. The building is thus specially adapted for the winter residence of feeble persons and those afflicted with pulmonary consumption.

Under the direction of Miss Bosworth, the Matron, the greatest possible approach to home comfort is secured, and it is a pleasant recollection, that several children that have been left here by their parents have said on leaving, that they had enjoyed themselves better than if they had been at home.

The department of subsistence is presided over by Mrs. Hill, a lady of great experience in the art. While no attempt is made to imitate the variety of hotel cooking, especial pains is taken to render plain food palatable and digestible.

A brief notice of some of the cases which have been treated in the institution may be of interest to medical men.

Flexed Knee-Joint.—Of this mal-position, six cases have been under treatment with entire success in bringing the limb to a straight position.

One of the cases was in the acute stage of synovitis occurring spontaneously, or without a wound. Sleep was greatly disturbed by spasmodic contraction of the muscles, and the mal-position was rapidly increasing. The limb was gradually restored to the straight position by a weight acting night and day over a pulley. As the joint surfaces ceased to press upon each other, the spasmodic muscular contractions disappeared. The ability to be moved was greatly aided by a splint, flanked with pasteboard, and worn behind. After six months' treatment, the discharge from the joint continues, but the limb is straight, and the joint movable and free from pain while the weight is on, but if the weight is left off for some time, pain in the knee returns. The probability is that recovery will be effected without deformity or lameness, but time is necessary for the gradual subsidence of inflammation and suppuration.

The remaining five cases were the results of inflammation in which the soreness had abated, or altogether subsided. In all these cases force was first applied under ether, and afterward gradual extension by means of a weight varying from five to fifteen pounds. In two of the five cases, the flexors of the leg were divided by a bistoury, but it is doubted whether the final result was any more quickly attained by this means. In one of the cases the wounds made in the process became the seat of a troublesome spreading erysipelas, with burrowing of pus among the muscles. All this would probably not have occurred, if the skin had not been wounded. The final result, however, was very satisfactory.

As the resistance after the subsidence of inflammation is usually in the short ligaments and adhesive attachments more than in muscular force, the division of the muscles removes only a minor difficulty.

In cases of extreme flexion, it is important that the gradual

extension should first be in such direction as to separate the joint surfaces, waiting for a later period of the treatment to straighten the limb, otherwise, portions of the joint surfaces are pressed together with great violence by the lever of the leg, and the pain of this pressure becomes insupportable. One case of stiff knee in the straight position, resulting from destructive inflammation following a severe injury, seemed to be much benefited by treatment, but with the discontinuance of extension and passive motion, the parts resumed their tightness and immobility. In the first application of force in this case, the skin was ruptured transversely over the ligament of the patella; but by means of silver sutures, a dressing of permanganate of potash and the straight position for a few days, union by adhesion was secured. When the soft tissue of a joint is to a considerable extent destroyed, there is very little probability of success in restoring its function.

Two interesting cases of cheiloplasty have been under treatment, one of which is the completion of the case on page 179 of the Transactions of the Illinois State Medical Society for 1867, and page 67 of the book as published by Lindsay & Blakiston. One of the important points in plastic operations, is to have a good arterial supply to the parts which it is desired should unite.

Chronic ophthalmia with persistent congestion, vascular cornea and granular lids and subsequent inversion of the ciliary margins, has presented several interesting cases. The division of the ciliary bands as practised by Dr. Hildreth, of Chicago, and the subsequent depression of the pulse for several days by means of veratrum viride have seemed to afford a starting-point from which to commence a restoration of the normal vascular condition. Some aqueous humor is usually lost at the time of the operation, which also aids in the relief of pressure, and though the liquid is soon replenished, a temporary relief has interrupted the succession and made a new action possible. Citrine ointment made with cod-liver oil, as recommended by Dr. Williams, of Cincinnati, has been found very valuable for granular lids, especially when following the treatment just indicated.

For inversion of the ciliary margins of the lids, with short-

ening of the palpebral fissure, the method of implanting behind the outer portion of the upper lid a portion of integument, has not lost its favor. A full description of this method may be found in the work on Plastic Surgery already referred to. The dextrous performance of this operation leaves no deformity whatever. It may be practised at the same time that the ciliary bands are divided. The removal of a strip of integument just above the ciliæ, after the method of Des Marres, is rendered effective by the operation for the elongation of the palpebral fissure.

Two operations for artificial pupil have been performed during the half year with perfect result. The new method of approach through the margin of the sclerotic has been followed.

In one case a gold tube has been inserted for closure of the nasal duct. This method, in the writer's experience, has succeeded in every instance in which the lachrymal sac was enlarged by accumulation of pus; but where this was not the cause, it has uniformly failed, probably because the sac closed down over the top of the tube and obstructed it.

Cases of enlarged or sub-involuted uterus, mal-positions and ulcerations of this organ, have also been under treatment in the Infirmary.

One case of radical operation for hernia according to Chisholm's method has proved completely successful. The amount of peritoneal inflammation was alarming for a few days, so as to raise the question whether the operation is justifiable.

An interesting case of lithotomy by the median method, in which three very large calculi were removed without incision of the prostate, but with laceration of the perineum into the rectum, demonstrates that incision of the prostate for the removal of a stone from the bladder is unnecessary.

The case also shows that a more extensive division of the perineum should be practised than is contemplated by Allarton's method where the stone is large. A recto-urethral fistula resulted from this operation on account of which several plastic operations have been performed, but thus far without complete success.

A case of compound comminuted fracture of the femur has demonstrated the great comfort secured by suspending the limb, permitting the patient to move his body at will without disturbing the relations of the fragments. A simplification of Dr. Hodgen's suspension splint has been employed, the extension being effected by means of a strip of adhesive plaster on either side of the leg, attached to the foot-piece, and the counter-extension being the weight of the body pulling down upon the limb which is upon the inclined plane of the suspended apparatus. Lint soaked in solution of permanganate of potash prevented the suppuration which otherwise would have commenced at the surface through the putrefaction of the fluids, thence spreading decomposition through the effusion in the deep parts of the wound. The shortening immediately after the injury was four inches. The patient recovered with a final shortening of three-quarters of an inch. A good result under the circumstances.

From comparative trials made with permanganate of potash and carbolic acid in erysipelas, putrefaction and complications of wounds, permanganate is believed to be greatly superior to carbolic acid and to everything else which has been tried. It is applied over wounds and upon erysipelatous surfaces in nearly a saturated solution. Over wounds it is best applied by laying on a portion of lint saturated with the solution. This is probably the best application to make to bullet wounds and those attendant upon compound fractures. By preventing the putrefactive change in the exudations and effusions, the extension into them of the organizing process is greatly favored. Care should be taken not to apply the solid salt, as it acts as a caustic.

The only death which has occurred in the Infirmary during the first half-year of its existence was that of an old man with enlarged and suppurating prostate. Death occurred at the end of ten days from his reception and twenty days from the inflammatory attack.

Great difficulty had been experienced in introducing the catheter, which was done three times a day, and the P. M. re-

vealed the existence of false passages which had been supposed to be among the causes of the difficulty of catheterism.

The convenience and the success with which cases have been managed in this institution, are an assurance of the propriety and the necessity of the undertaking.

July, 1868.

Correspondence.

EMOTIONAL SUSCEPTIBILITY.

Prof. Davis, *Dear Sir:* The following case is considered interesting, because it illustrates a degree of nervous susceptibility which individuals rarely possess:—

A few days ago, I was called to see a gentleman who, it was said, had fainted. I found him seated in a chair, supported by a friend; animation entirely suspended; face of cadaveric pallidness; skin bathed in a cold perspiration; extremities cold and pulseless. Had him placed at once in a horizontal position, and applied the usual restoratives. After several minutes, he began to show evidences of returning animation, and soon entirely recovered.

The narration of the details of an operation for the excision of a hemorrhoidal tumor, ungarnished by an attempt to convey an idea of severe suffering, produced this severe shock to the nervous system, with its untoward symptoms.

Can we account for this great disparity between the manifestations of the emotions and the power of the will? This gentleman felt these depressing emotions "swelling up," as he expressed it, and thought to be able to overcome them by an effort of the will. How he succeeded has been shown.

"In a well-balanced condition of the mind, under the ordinary conditions of life, the emotions are controlled by the will," says one. But, are not emotions which are due to the action of the sympathetic system beyond the influence of the will? Doubtless, the leading emotions—grief, joy, etc.—are expressed through

this system of nerves, each exercising a peculiar influence upon the circulation: exciting, depressing, or otherwise disturbing it; and are only indirectly under the control of volition. The effect of an emotion cannot be controlled or avoided, except we avoid or control the occurrence of the emotion, by occupying the mind with other thoughts, of a different character, more or less agreeable, as may, at the time, be indicated by the mental condition. A remedy for the cure of anger, which teachers of music prescribe for their pupils, is dictated on this principle: "When you get vexed or angry, *sing*." And, certainly, if one enters properly into the spirit of a cheerful song, he can entertain no emotion of anger. This is rational therapeutics, undoubtedly.

In the case of the gentleman mentioned, the symptoms observed may be referred to the organic system of nerves acting upon the heart and circulation, producing partial paralysis of the heart's action, resulting in a deficient supply of arterial blood to the great nervous centres, causing fainting, cold extremities, pallor, etc., as a result. He is probably 45 or 50 years of age, and evidently of refined manners and education. How much does education and the manner of life modify emotional, or, if you will, nervous susceptibility?

Truly yours,

THEO. GRIFFIN, M.D., 789 State Street.

MUSCULAR RHEUMATISM.

I have noticed in the Journals that the treatment of cases denominated Muscular Rheumatism, including lumbago, pleurodinia, sciatica, etc., is a matter not well settled. In a late number of the *Lancet*, the course pursued in three of the London Hospitals was given, differing from each other, and not embracing the course that I have found successful in quite a number of cases this year, my own included.

Many years ago, Mr. Carmichael, the celebrated surgeon of Dublin, had sciatica gradually creep on him till he was entirely

disabled. For some little time, if I mistake not, before he yielded to it, he had to be carried from his carriage to his lecture-room. He had been in the habit of working very hard in his profession, eight hours a day, from breakfast to dinner, without any form of lunch. This proved too much for him, as it probably will for any man.

When he concluded to be treated efficiently, he came to a hot spring in the Pyrenees, and had a warm bath every day, with a dose of Pil. Hydrarg. every night, and Seidlitz powder in the morning. This course restored him the use of his limb within a reasonable time. I have tried a similar course with the best effect in old, confirmed cases.

But the remedies I use in acute cases are calomel in small doses, 1 or 2 grains, with gum Guaiac, and Dover's powder, three times a day. The Dover's powder in doses sufficient to soothe the pain, 3 to 5 grs., and the Guaiac in 8 or 10 gr. doses. These I accompany with a warm water (with salt) sponge-bath every morning, to be followed by good rubbing, with dry towels. A cathartic of castor oil once in two or three days, if the powders do not act sufficiently, and sometimes if they do act some, is very useful.

With this course my cases have uniformly yielded. It is quite possible that belladonna would prove a better remedy in these cases.

In my case, the pain commenced at the sacro-iliac junction, and extended across the back, affecting the lumbar muscles. It was attended with a general failure of the secretions, gradual whitening of the tongue, and increased heat of the skin. The remedies gave me relief in a very few days. F. B. E.

Hastings, Min., *Sept.* 14, 1868.

An autopsy has been performed at Bellevue Hospital on a body that had been perfectly preserved for 72 days by means of carbolic acid; still another public autopsy took place upon the body of a patient who had died 107 days previously, and had been preserved in a similar manner, with the same highly satisfactory results.

The Clinique.

CLINICAL REPORT FROM MEDICAL WARDS OF MERCY HOSPITAL.

By N. S. DAVIS, M.D., Professor of Practical and Clinical Medicine, in Chicago Medical College.

TUBERCULOSIS AND CHRONIC DIARRHŒA.

The Professor remarked, that the first case to which he should invite the attention of the Class was a young man, aged 18 years; naturally slender, light complexion; belonging to the laboring class, who was admitted to the Hospital only two or three days previously, but who had been sick about six months. The patient states that most of the time since the commencement of his sickness he has had tenderness, swelling, and pain in the left half of the abdomen; and at times fever and cough. He thinks that there existed a tumor in the left side of the abdomen, which at a certain stage of his disease broke, and discharged into the bowels, giving rise to purulent discharges by rectum. Since which time, he has continued to have muco-purulent discharges, sometimes mixed with blood, and resembling those of chronic dysentery.

Such are the chief items in the history of the case, as stated by the patient himself. The attention of the Class was then called to the present condition of the patient. The anæmic hue of the skin; the thin and slightly retracted lips; the expression of anxiety; the general emaciation; the quick, irritable pulse; connected with the absence of febrile heat and the length of time that the patient had been sick, clearly indicated pathological changes somewhere of a serious nature. The continuance of muco-purulent discharges from the bowels every three or four hours, and sometimes more frequently, with still existing tenderness over the sigmoid flexure of the colon, point directly to the abdomen as the seat of the more advanced pathological changes.

Is the case one of simple chronic recto-colitis or dysentery,

involving thickening and ulceration of the mucous membrane of the descending colon? Or is this state of the mucous membrane complicated with disease of the mesenteric glands? To determine these questions requires a careful physical examination of the chest and abdomen. The latter is moderately tympanitic, with some tenderness towards the left side, but neither palpation nor percussion enables us to detect any well-marked tumors or enlarged glands. This, however, does not prove the non-existence of disease in the mesentery; for when the abdomen is full as in the present case, it is impossible to trace out by the touch even considerable enlargements of the glands in the mesentery.

Attention was next turned to the chest, and after the Class had listened carefully to the pulmonary and cardiac sounds, it was found that the respiratory murmur was harsh and irregular over the upper lobes of both lungs, with marked increase of vocal vibration, and moderately diminished resonance on percussion.

These physical signs plainly indicate increased density of the upper part of the lungs; and the absence of all the usual symptoms of pneumonia render it almost certain that the increased density is caused by crude tubercular deposits.

If this is true, it renders it highly probable that more or less of the tubercular deposits also exist in the follicles of the mucous membrane of the larger intestines, causing the protracted and obstinate intestinal discharges. The general aspect of the patient, the quick pulse, the results of physical examination of the chest, and the long continuance of the intestinal disease, in spite of protracted and judicious treatment (he had been treated several weeks in another hospital before admission here), leave little doubt but the case is one of tuberculosis. This has a very important bearing on the prognosis. Simple chronic dysentery, even of long standing, can generally be cured. But chronic dysentery or diarrhœa founded on tuberculosis is very generally fatal. The condition of the patient may be temporarily improved, by lessening the frequency of the discharges, and regulating judiciously the diet. But the

improvement is only temporary. Even if, as now and then happens, the intestinal discharges entirely cease, or become natural, in a few weeks cough supervenes, and all the active symptoms of pulmonary tuberculosis are developed.

The treatment in all these cases must be tonic and anodyne; the one to sustain the general tone of the system, and the other to allay the local irritations. In similar cases, it was stated that a combination of sub. nit. bismuth, sub. carb. ferri, and morphine, had been found of great value.

Accordingly, the following prescription was directed:

℞. Sub. Nit. Bismuth,---------- ℥iij.
Sub. Carb. Ferri,---------- ℥ij.
Sulph. Morph.,---------- 5 grs.

Mix, divide into 30 powders; and give one before each meal-time and at bedtime.

If this did not sufficiently restrain the discharges, the doses may be given more frequently. The diet must be very simple, yet nutritious; such as milk, milk and flour, boiled rice, and animal broths.

PULMONARY TUBERCULOSIS, WITH PARTIAL PARALYSIS OF THE ARMS.

The next case to which the attention of the Class was directed was that of a young man, who was admitted into the Hospital about three months previously, in an advanced stage of tubercular phthisis. He was a native of Germany, about 25 years of age, and had been declining in health for six or eight months.

At the time of admission he was emaciated; pale; pulse frequent and weak; skin cool, with copious night-sweats; frequent serous discharges from the bowels; cough and purulent expectoration. He was too feeble to leave his bed.

Auscultation and percussion revealed extensive tubercular deposits in both lungs, and a large suppurating cavity in the middle lobe of the left side. The latter still exists, and affords an excellent sample of the cavernous sounds to which the Class had an opportunity of listening with the stethoscope. To check the hectic fever and night-sweats, as well as to lessen the diar-

rhœa, he was placed, immediately after admission into the Hospital, on the use of the powders of sub. nit. bismuth, sub. carb. ferri, and sulph. morph., every 4 hours, with sweet milk and wheat-flour porridge for nourishment.

For some time he continued very feeble, affording every indication of an early fatal result. But after the first two weeks the condition of the bowels and digestive organs began to improve slowly; and for the last three weeks they have been quite regular, with a fair appetite. The hectic and night-sweats have also ceased, but he still coughs and expectorates muco-purulent matter, more especially every morning. His breathing is very short, and slight exercise induces panting and palpitations. His feet and ankles are quite anasarcous, with slight evidences of œdema over the whole surface of the body.

But the point of special interest connected with this case was a partial paralysis of motion in both upper extremities. He could not elevate the arms to a position on a level with the shoulders, and found great difficulty in feeding himself. It illustrated a class of cases of paralysis arising from deficient oxygenation and decarbonization of the blood, by which it becomes incapable of maintaining the natural action of the nervous centres, and greatly favors the fatty degenerations of tissue. In two or three cases of a similar character, except there had been no tendency to diarrhœa, the internal use of 10-grain doses of chlorate of potassa dissolved in mucilage of gum-Arabic, and repeated four times a day, had done much good. The extreme sensitiveness of the bowels, in the present case, renders the chlorate inadmissible. The remedies most likely to benefit the case before us, in addition to the tonic and anodyne powders before mentioned, are electricity and small doses of strychnia.

The Lecture closed by directing the patient to have gentle currents from an electro-magnetic battery passed through the arms and spine, once every day; and a sugar-coated pill of the thirty-second part of a grain of strychnia after each meal; continuing the powders of bismuth, iron, and morphia before each meal and at bedtime, as before directed.

Note.—Two weeks have elapsed since the foregoing clinic, and the last patient mentioned is up, dressed, and out in the open air a little every day, and the ability to use the arms has improved.

Selections.

CLINICAL LECTURE ON A CASE OF EPILEPSY AND VERTIGO, IN WHICH BLOODLETTING WAS EMPLOYED WITH ADVANTAGE.

By C. HANDFIELD JONES, M.D., Physician to St. Mary's Hospital.

Gentlemen: "Medio tutissimus ibis" is a wise old saw, but one which it seems not easy to act upon. The pendulum of opinion commonly deviates to one side or other of the true line. It appears to me, that at present there is some tendency to error of this kind in the case of epilepsy, which seems to be regarded by some too much as if it were invariably associated with deficient blood-supply to the brain. Very often this is the case; but that the encephalon is by no means unfrequently hyperæmic in epileptic states, and that this hyperæmia may even materially contribute to the production of the order, I think I shall be able to prove. Let me ask your attention to the following history:—

W. F., aged 49, stableman, was seen on Aug. 15th, 1865. He was sent to me by my friend Dr. Palmer, from whom I received the following statement: "Eleven years ago, he had a severe epileptic fit for the first time; he continued vertiginous, weak, and unable to work for several days; his pulse feeble and small; his skin cool and moist. Leeches, cold to the head, free purging, and iodide of potassium, failed to relieve him. He was then admitted into St. Mary's. On coming out, he told me that he was cupped and had various remedies, but all failed to do him good until he was bled, after which he rapidly and completely recovered. Since then he had several attacks of severe vertigo, with such muscular weakness as to compel him to give up work; the second was accompanied with an approach to coma. Since then they have rather diminished in severity. On each occasion, his tongue has been moderately clean; pulse between 60 and 70 decidedly soft, and not filling out the artery, without any jerk; skin pale, cool, and moist; eyes not injected;

no heat of head; no thirst; appetite diminished. Each time I have tried all I could to avoid venesection, have purged freely, applied cold to the head, once cupped him, forbidden stimulants (which he says make him worse), but have each time been compelled to bleed. The last time (April 19th), I am certain that his pulse was stronger and fuller two days after the bloodletting than it had been for days before. The day after giving the iodide of potassium, he was decidedly more vertiginous." Dr. Palmer describes the patient as usually of slow, hesitating speech, and having the puzzled, hebete look of an epileptic, with a small forehead and brain-case. Such is the account given me by a most able and intelligent observer.

I subjoin the account I received from the patient's wife. She states that her husband was taken with a fit one morning at 4.45 A.M., while in bed. He was as well as ever he was in his life when he went to rest. The fit did not last long. He went to his work the same morning; but in about two hours, while at work in the mews, he was taken with another, and had seven that day, at about two hours' interval. The next day he had three fits, and continued to have them more or less frequently for three weeks until he went into St. Mary's Hospital. During this time, he lost his speech when the attacks were coming on; but, in the intervals, he was conscious and able to speak. He was leeched before he went to the hospital; but when there he was cupped and bled from the arm several times with great relief. He was there several weeks. If he got too much beer it affected his head, and made him stupid; he used to take a great deal. He had had no attack lately (Dec. 1865). So far the wife.

At my interview, I observed that his lips were pallid; his pulse 75, of good size and force; his head cool, not tender, but it felt as if it did not belong to him; his appetite was good; the tongue clean. The rhythm and sounds of the heart were normal; but the organ was rather displaced towards the epigastrium. He felt no great weakness. The giddiness he described as coming on him all at once, and lasting (till he was bled) for weeks, with intervals of comparative amendment. When the giddiness was on him he was unable to lie down, but could at other times. He had no nausea or sickness. He never passed worms, as far as he was aware. He had typhus fever when he was young; but no other illnesses, except falls—once from the roof of a house about eighty-four feet high, when he "cracked his head a bit" and was stunned for a few minutes; once also he was knocked down by a cart and struck his head.

In fact, he seems to have hurt his head a good many times. The bone was indented notably at the upper and fore part of his head towards the right side; but there was no tenderness in this situation. He had been bled at least six times, and been cupped and leeched besides. Hot weather did not try him at all, nor did cold; he could expose his bare head to the sun without any discomfort. He denied having had syphilis; and presented no outward indication of it. He was obliged to be careful in what he drank; he could not take much beer.

August 17. He was more giddy to-day—"just the same as a drunken man." The forehead was not hot; the eyes were dull, but not injected. Pulse quite quiet, steady, and regular. Bowels well open. Ears cool, and cheeks and prolabia actually anæmic. Pressure on the carotids caused the veins of the forehead to fill, and made the giddiness much more severe. There was no undue pulsation of the cervical or temporal arteries. The pupils were lively. His manner was very tranquil, entirely free from nervous fussiness. He was not apt to have cold feet.

I could see no rational indication for bloodletting; but, as he did not mend without, and as former experience was in its favor, I could say nothing against it. He was bled to sixteen ounces, and came to see me the next day, when he stated that he felt better in one hour after the bleeding, and was nearly well, going to work the day after. The pulse and general aspect, and condition of pupils, were just as before. I did not see him again till September 15th, when he came to see me at St. Mary's Hospital, complaining of a return of the giddiness during the last five days; it was very severe, and had not been relieved by calomel and mistura alba or by nitromuriatic acid. I ordered for him five grains of powder of colchicum thrice daily; of this he took a few doses, and got rid of his disorder completely. His pulse, I am informed, was fuller and stronger after he had taken the colchicum than it had ever been before.

January 3, 1866. He had been well since last date, with the exception of one attack, which was brought on by drinking, and ceased after purgation.

December 5, 1867. He remained quite well up to the present time. His urine was examined and found to be non-albuminous.

That the bleeding in this instance was really advantageous can, I think, hardly be questioned, regard being had not only to the immediate results, but to the subsequent condition of the patient. The attacks have not been rendered more frequent, but the reverse; in fact, for some considerable time he has been quite free from any disorder.

The vertigo must, I think, be regarded as a manifestation of epilepsy, as it succeeded the latter directly in time, and was relieved by the same measures, and by those alone, which benefited the convulsive disorder. That it depended on increased intravascular pressure can, I think, hardly be doubted, although the exterior of the head certainly exhibited no signs at all of hyperæmia. The effect of pressure on the neck, which must have told chiefly on the jugular veins as it caused distention of the frontal, was to aggravate the giddiness; and this result not only confirms the opinion above expressed, but goes to show that the blood-flow *a tergo* was free, that there was no obstruction in the arteries. The greater fulness and strength of the pulse after the bloodletting and the colchicum resulted, I believe, from the cessation of the depressing effect which the vertigo exercised on the heart itself. Although the disorder was a neurosis, it is evident that the nerve-force in this man must have been of a very different quality from that which it has manifested in sundry instances, one of which I have related in my work, p. 61, where bloodletting appeared to be the immediate cause of most severe and prolonged epilepsy.

It is probable that the injuries to the head had rendered the brain less tolerant of any undue amount of even its natural excitant, the blood; as they had also of a less natural one, the beer. If this abnormal state of excitability increased, we can well understand that depletion might be a necessary means to relieve it. The condition just referred to implies some departure from the type of healthy nutrition; and it is far from uncommon to find hyperæmia ensuing under such circumstances. It appears to me that the smaller arteries which are most concerned in hyperæmia and in like conditions go very often along with the tissue they supply in regard to their vital activity. Certainly, they are often relaxed while a tissue is vigorously performing its function; but this activity can only last for a time; and, if the hyperæmia be prolonged, the functional power of the tissue soon declines, and then the hyperæmia becomes solely injurious, and, as I wrote many years ago, "instead of supplying a want, imposes a burden." Again, if the vital power of the tissue be lowered *ab initio*, that of the arteries is very apt to be lowered along with it, and then, without any previous manifestation of functional activity, we have at once injurious hyperæmia. Of this, frost-bite and chilblains, and probably many common catarrhal inflammations, afford good examples. If we suppose this man's brain to have failed now and then in its due mode of nutrition, its nerve-power to have

declined, as was not unlikely, after having been a good deal knocked about and "bemused with beer," the smaller cerebral arteries would readily fall into a like state of paresis, and thus the blood-supply would become excessive, and the nerve-power be thereby still further lowered and deranged. Bloodletting, by lessening the amount of blood, might contribute materially to enable the brain-tissue and its arteries to regain their normal condition.

As the pulse became fuller and stronger after the bloodletting and colchicum, it might have been expected that the intravascular pressure would be increased, and therewith the hyperæmia. Very possibly the pressure was increased in the radial and some other arteries; but there is no necessity that it should have been so in the carotids and vertebrals, or their smaller branches, which are the chief regulators of the blood-flow. Moreover, the very circumstance that the smaller arteries were more contracted than before, would, by lessening the facility of the escape of blood from the larger tend to produce greater fulness of the pulse, and excite the heart to stronger action.

Let me now produce to you some evidence which I have brought together from various sources, which appears to me tolerably conclusive, that active hyperæmia, determination of blood to the brain, may be the efficient cause of epileptic attacks.

C. H. Parry states that a patient, "Miss F., who has twenty or thirty epileptic fits annually, for two or three days before a fit constantly finds a constitutional enlargement of the thyroid gland increase to a very great degree; in a day or two after the fit, it returns always to its natural state, the accumulation of excitement in her subsiding at the same time." That this evident local turgescence of an organ, fed by arteries given off near those supplying the encephalon, did not cause anæmia of the latter, is tolerably clear, from its being mentioned that the head was unduly hot, the feet being cold. The same author refers to a very striking case, by which, he says, "it has been demonstrated that convulsions may depend on excessive impetus of blood in the vessels of the brain, since in that case they were removed by interrupting or diminishing the flow of blood through the carotid arteries to that organ, in consequence of which a state of sopor often ensued." In another case, mentioned by him in the same place (*Elements of Pathology and Therapeutics*, p. 254), a constant twitching of certain fibres of the flexor muscles of the forearm was uniformly suspended by compression of the carotid artery on the opposite side, while it was not diminished by compression of the artery on the same side.

Trousseau corroborates Parry's statements. He says that he has practised and recommended compression of the carotids for more than twenty years, and that he has found it highly serviceable. He makes special reference to this procedure when speaking of the convulsions attending on scarlatina dropsy; but employs it equally in other similar conditions not resulting from uræmia. He directs the artery to be compressed especially upon the side opposite to that on which the convulsions are most marked, and gives particular directions for the manipulation. He states that, when an artery is thus effectually compressed, the red flush of the face is sometimes suddenly succeeded by pallor, and that in some instances the eclamptic convulsion immediately ceases and gives place to perfect relaxation. I do not understand him to affirm that the proceeding is always successful; but, I think, none can doubt that his testimony strongly supports the position above stated. Other evidence can be cited to the same effect. In a case observed by Reimer, and alluded to by Schrœder van der Kolk (Sydenham Society's edition, p. 228), compression of the carotids succeeded twenty-two times in cutting the fit short, the patient experiencing great relief and improvement in his memory and mental condition. Labalbury (*Gazette des Hopitaux*, 1860, Sept. 15th) relates a case of puerperal eclampsia which was cured by compression of the carotids.

Parry gives the following case as a proof that epilepsy may be cured by bleeding and low diet. About thirty years ago, he states, he was sent for to see a nobleman, who had been a gross feeder but not intemperate, and had been subject to epileptic fits. He found him insensible and stertorous, after having suffered repeated paroxysms of the disorder. His face was extremely flushed, and his pulse strong, full, and laboring. His bowels had been duly open without relief. After bloodletting to fourteen or sixteen ounces, the insensibility, which had continued many hours, very quickly ceased. The bleeding was more than once repeated. Purgative and saline medicines were given. A low diet, as well as much bodily exercise, was recommended. The patient soon recovered his health, and never experienced any return of his malady. Had not the bloodletting been a right remedy in such a case as this, it is most probable it would have been injurious, and would being (repeated) have induced the speedy recurrence of the disorder, as it did in a case recorded by Dr. Copland. (*Vide* note, p. 799, art. Epilepsy.)

Dr. Parry mentions another case, which exemplifies the con-

verse. An old man, who had lived freely, had a chronic inflammation of one of his legs accompanied by œdema. Both these affections were greatly relieved by the application of a tight bandage. In a few days he was, for the first time in his life, seized with violent epilepsy.

Graves, relating the successful treatment of a boy, aged nine, for uræmic convulsions occurring after scarlatina, by cold affusion on the head, states that, as he was sitting by the bedside of the patient, he was more than once able to predict the immediate approach of the fit, by means of watching the pulsation of the carotids, which then became much more frequent and stronger. This observation (he says), taken in connection with the fact that the pulse at the wrist became weaker and more indistinct at that very moment, suggests many interesting considerations concerning local determinations of blood. Though the uræmia was doubtless the prime cause in this instance in inducing that state of brain which gave rise to the convulsions, the peculiar hyperæsthesia of the excitable districts, yet the success of the cold affusion, leeches to the head, and purgatives, render it also, I think, clear that this perilous symptom was mainly staved off by lessening the blood-flow towards the head. So also in the convulsions which are apt to occur in the early stage of the exanthemata, there can be, I conceive, no doubt at all that the brain is, as Dr. West describes it, in a state of active congestion, true hyperæmia. Exposure to the heat of the sun may, as he says, disturb the circulation and favor congestion of the brain, and so induce convulsions or other symptoms of an overloaded state of brain, which may all subside as soon as the excited circulation has recovered its wonted balance. He gives a good case in point, very similar to one respecting which I was consulted last year, in which, after exposure to a hot sun, actual and very severe meningitis occurred.

The eclamptic attacks which occur in puerperal females are undoubtedly sometimes greatly relieved by bloodletting and antimony, and consequently can scarcely be regarded as independent of undue intravascular pressure affecting the encephalon. Of this the following case (vide *Lancet*, 1866, Nov. 3) may be cited as an example.

Mary D., aged nineteen, a well-developed, robust, plethoric woman, had always lived well, and never had a day's illness. She had one sister, aged fourteen, who some years ago was subject to occasional epileptic seizures. In her first labor, she had two fits of convulsions, in which she foamed at the mouth and bit her tongue, her features being much distorted. Mr.

Draper was sent for by the midwife in attendance, and found the patient recovering from the second attack. She was in a semi-conscious condition; face flushed; skin hot, but moist; tongue large and red, and lacerated by the teeth; head hot; pupils rather contracted; pulse 120, full, and with difficulty compressible; occasional slight muscular spasm. The child's head being at the pelvic outlet, where the midwife said it had been for about two hours and a half, the forceps were applied, and a male child delivered. It was slightly asphyxiated, but was quickly restored. After the expulsion of the placenta the patient appeared quiet and comfortable. In three-quarters of an hour the convulsions returned, the paroxysms being more severe than before. Sinapisms were applied to the nucha and the calves, and cold to the head; and a dose of calomel and jalap was given, besides the following draught every hour:

℞.—Ammon. potassio-tartrat. gr. ½; potassæ nitratis gr. x; sodæ potassio-tartrat. gr. xx; aquæ ℥j.

Most of the powder was rejected by vomiting. After this treatment the patient remained tolerably quiet about two hours, when she had another relapse, the first being more violent and recurring more rapidly than hitherto; and she remained unconscious between the paroxysms. The face, as before, was flushed; respiration hurried and short; pulse 120 to 130, hard. As there was no albumen of consequence in the urine, about twenty-five ounces of blood were taken in a full stream from the arm. The pulse then became soft and compressible, and the patient shortly became conscious. She was ordered five grains of calomel and a minim of croton oil, and the above saline mixture to be continued. After this, the patient had no return of the fits, slept moderately well during the night, and made a good recovery.

In contrast to this case, it would be easy to cite numerous others where not depletory, but sedative treatment has been indicated, and found highly beneficial. No doubt can exist that, in puerperal eclampsia, the quality of the disorder may be different in different individuals; and, if so, why may it not be the same in epilepsy?

If any should object to the instances I have cited of uræmic, puerperal, and exanthematic convulsions being considered truly comparable to the attacks of essential epilepsy, I reply that Trousseau expressly recognizes their identity with those of epilepsy as regards the morbid phenomena, and says that they only differ in the attacks being multiple, and in the circumstances under which they occur. Neither of these features seems

to me to establish any material distinction between the two classes. Multiple attacks are, we well know, met with every now and then in chronic epilepsy. As to the attendant and originating circumstances, when the visible result is so similar, it seems to me very much like begging the question at issue to affirm that the condition of brain they produce is unlike that which prevails in all cases of essential epilepsy. It is fully conceded that, among the cases of epilepsy occurring in our large towns, it is rare to meet with one where the morbid condition is not one of anæmia and weakness and undue mobility, rather than of sthenic excitement and plethora; yet I can by no means admit that the latter condition is to be excluded from our list of causes, and I believe the case I narrated at the beginning of this lecture to afford a fair instance in point. To the above evidence must be added that of Schroëder van der Kolk, to whom we are much indebted for his minute examination into the changes produced in the nervous centres by this disease. He entirely dissents from the view that suddenly induced anæmia is the essential precursory condition of the epileptic attack. Among other observations, he says: "Equally little does this view find support from the fact that, before an attack, epileptic patients are usually more excited, more lively, and more irritable, and their face and their head manifest a greater degree of congestion. In one case I was able to ascertain this with precision. In a young man aged nineteen, who, under the use of digitalis, had continued for a considerable time free from attacks, I found the heat of the head excessively great in comparison with that of the cheek," the temperature of the forehead and vertex exceeding that of the cheek by 13° Fahr. Scarcely fifteen minutes after this observation had been made, a violent attack came on. (Sydenham Society's translation, p. 299.) He has found positive advantage from the use of derivatives, issues, and setons or cupping to the neck; not only the epilepsy, but the consecutive dementia, being removed or greatly amended thereby.

I have often spoken to you of the varying quality of inflammatory disease; and I hope, from this review, you will be inclined to agree with me, that the same holds true of convulsive disorder.—*Brit. Med. Journ.*, Feb. 8, 1868.

The oldest Doctor in the world, Professor F. Verdugo, Salamanca, Spain, died, lately, aged 105 years. He had practised medicine for eighty years.

PERISCOPE.

OULACHAN OIL AS A SUBSTITUTE FOR COD-LIVER OIL.

The following valuable article has been recently published in the *Pharmaceutical Journal and Transactions*. (London, June, 1868,) by the distinguished botanist and zoölogist, ROBERT BROWN. As our possessions have lately been extended on the north-west coast, it has peculiar commercial and therapeutical interest, and we copy it therefore at length:—

"The fish which forms the subject of this communication may, if we consider its importance to the Indians, or the still more useful purposes to which both the fish itself and its oil might be applied, without fear of contradiction be ranked as one of the most valuable products of the western shores of America. Many of the earlier fur-traders and adventurers refer to it in enthusiastic terms under its Chinook name of *Oulachan* or *Eulachon*,* and give accounts of its abundance in the Columbia River early in this century. All readers of WASHINGTON IRVING'S charming 'Astoria,' cannot fail to remember his description of it. It belongs to the family *Salmonidæ*, and is usually classed in Gerard's genus *Thaleicthys*, but as I believe that that genus is separated from the older one of *Osmerus* on very insufficient grounds, I have preferred to designate it as *Osmerus pacificus*. The synonymy and specific characters will therefore stand as follows:—

OSMERUS PACIFICUS (*Salmo* (*Mallotus*) *pacificus*), Richardson Fauna Boreali-Americana; *Thaleicthys Stevensi*, GERARD, Gen. Rep. on Fishes; *Thaleicthys pacificus*, "Grd." COOPER and SUCKLEY Natural History of Washington Territory, Plate LXXV. figs. 1–4; *Osmerus pacificus*, (Rich.) AYRES, Proceedings Cal. Acad. Nat. Science, ii. 64. Head subconical and pointed. Mouth large; posterior extremity of maxillar bone extending to a vertical line drawn posteriorly to the orbit. Eye rather small. Adipose fin placed opposite the posterior portion of the anal, which is rather elongated. The insertion of the ventral fins is situated considerably in advance of the anterior margin of the dorsal. Scales moderate, subelliptical. Dorsal region grayish-olive; middle of flank yellowish-orange,

*Ross Cox calls it "the sweet little anchovy" ('The Columbia River,' etc., vol. i. p. 105.) It is also spelt *hoolakan* and Ulichan. Alexander Ross calls it the "fathom fish," because strung on threads in their dried condition, they were sold by the fathom ('Adventures of First Settlers on the Columbia River,' p. 94).

dotted with black; belly yellowish, unicolor; upper sides and surface of head grayish; fins unicolor.

2. The *Oulachan* or *Eulachon* is a small, delicate-looking fish, about the size of a smelt, and not unlike it, semipellucid, and with fine scales. On or about the 24th of March,—at nearly the same time each year,—it enters the northern rivers, and the southern ones a little later. It was once abundant in the Columbia, but that stream being now disturbed by the traffic of steamers, it is only now in exceptional years that they are caught there in any quantity. In Fraser River, and in most of the rivers on the coast of British Columbia, they are still found at that season (March) in greater or smaller quantities; but it is in the Naas River, falling into the Pacific, in lat. 54° 40′ N., that the Eulachon is found in the greatest quantities, and it is to its capture in that stream that these notes chiefly relate. The fish comes up from the sea into the fresh water for the purpose of spawning, but, unlike most of its allies,—the salmon proper,—on the coast, returns to the sea again, and is not seen until the following year. During that season they swarm in inconceivable shoals, and I can well believe that the Indians indulge in no hyperbole when I have heard them say that their canoes have been lifted in the water by the countless swarms of fishes. Their arrival is at once heralded by flocks of *Laridæ* and other marine birds swooping down to seize upon them, and during the whole of the fishing season the screams of the gulls vie with the shouts of the Indian fishers.

3. By long custom made and provided for, northern tribes have a vested right of fishing the Eulachon on the banks of the Naas, and certain other equally numerous and powerful tribes are prohibited from enjoying this privilege, and are compelled to buy their oil from their more fortunate neighbors. Accordingly, some days before the expected advent of the fish in the river, the Indians assemble from far and near to the number of several thousands, in order that they may take up their proper camping-grounds on the banks. Men, women, and children come,—it is the herring-fishing of the Indians, and all can be employed. A general holiday prevails, and tribes vie with tribes, families with families, in dress and feasting, and show their joyousness in a thousand different ways. Families who have not met for twelve months now meet, and the Eulachon, or *Yghuh* (almost unspellable and certainly unpronounceable), fishing is looked forward to from one year's end to the other as a time for gossiping, courting, and general merrymaking. In a few days, however, the fish begin to make their appear-

ance, and now all are on the alert, and all idling is at an end. The first shoal, as I have said, come into the river, from the 24th to the 27th of March, and stay three days. These are so exceedingly fat that they cannot be cooked in a pan, for they will "blaze up" like a mass of oil. Out of these the best portion of the oil is made. In about three days these begin to disappear, and are succeeded by a second shoal, not so large or so fat, and these again in a day or two by the third and last shoal, which is poorer, and are dried for winter use, being sufficiently free from oil to permit of this. So fat are these last even, that if lighted during the dry state, they will burn like a candle, and are often used as such by the natives, hence they are sometimes called the "candle-fish." The river during the time of fishing presents a busy scene, covered with canoes sweeping the fish in, while others filled are landing and being unloaded by the women and children, again wildly to rush back to share in the harvest. Ashore the scene is not less vivid. Fires are blazing and pots boiling, and boxes being filled with the oil, while in and around and all over, prevails an amount of unctuousness indescribable,—a greasiness of which it is impossible to conjure up the faintest idea! The fish are chiefly taken by nets (in the Naas), but myriads get washed ashore and are caught by the old women and children and kept as their perquisite. In Fraser River they are principally captured by means of a flattened cedar pole, the edges of which for a couple of feet or so near the end being set with sharp teeth or nails, which act like so many spear-points. The Indian, standing in his canoe, sweeps this through the water, and so numerous are they that there is no fear but that a number will be impaled on the points. These are swept behind him into the canoe as a mower uses a scythe, until the canoe is full. Herrings and shoals of all other small fishes are caught likewise in this ingenious mode. Besides those kept for drying or from which the oil is made, vast quantities are used in the fresh state for food, and the sudden arrival of fish, occurring generally just at a time when the Indians' winter stores are nearly finished and they are rather pressed for food, the plethora often proves fatal by producing surfeit.

4. The oil is obtained by putting the fish into water in boxes —generally hollowed out of a solid block of cedar (*Thuga gigantea*, Nutt., *T. Menziesii*, Dougl.), or so closely made as to be water-tight—and then throwing in red-hot stones. This ingenious method of boiling is practised by all the Indians on the north-west coast of America. The oil is then skimmed off the

surface and set aside to cool. The oil is never made by suspending iron vessels (after the more familiar manner of the whites) over the fire, for in that case the fishes would be destroyed, and it would be difficult to separate the broken fragments from the oil. The quality, however, greatly depends upon the care employed, and the amount of heat used to extract the oil from the fatty tissues of the fish. An inferior description is also made by squeezing the fishes out of which the finer oil has already been extracted in the method described, in a cloth against a board.* Properly prepared, the oil is at a temperature of 60° Fahr., amber-colored and liquid. At a lower temperature it becomes thick and opaque, increasing in solidity according to the degree of cold; in this state it is whitish in color, and resembles soft lard. The northern tribe keep it in boxes of their own making, but the more southern Indians—such as the Quăkwolths, at Fort Rupert (lat. 50° 42′ 36″ N., long. 127° 25′ 07″ W.)—preserve it in bottles, made out of the stem of the giant seaweed, *Macrocystis pyrifera*, Ag., squeezing out a little, when required, as a painter does his colors out of the tinfoil tubes.

5. The fish, cooked fresh, is most delicious, and, when salted, is also a very palatable article of food, and held in much re-

* I have given the general rationale of the process of manufacture. There are, however, various superstitions connected with the *oulachan* (as with everything else the Indian has to do with), which entail various minute ceremonies. Mr. William Duncan, the excellent missionary at Metlakatah, thus refers to it in a letter addressed to the Church Missionary Society:—"...The process (of extraction) is as follows: Make a large fire; place three or four heaps of stones as big as your hand in it; while these are heating, fill a few baskets with rather stale fish, and get a tub of water into the house. When the stones are red-hot, bring a deep box, about eighteen inches square, near the fire, and put about half a gallon of the fish into it and as much fresh water, then three or four hot stones, using wooden tongs. Repeat the doses again, then stir up the whole. Repeat them again, stir again; take out the cold stones and place them in the fire. Proceed in this way till the box is nearly full, then let the whole cool, and commence skimming off the grease. While this is cooking prepare another box in the same way. In doing the third, use, instead of fresh water, the liquid from the first box. On coming to the refuse of the boiled fish in the box, which is still pretty warm, let it be put into a rough willow basket, then let an old woman, for the purpose of squeezing the liquid from it, lay it on a wooden grate, sufficiently elevated to let a wooden box stand under; then let her lay her naked chest on it, and press with all her weight. On no account must a male undertake to do this. Cast what remains in the basket, anywhere near the house, but take the liquid just saved and use it over again instead of fresh water. The refuse must be allowed to accumulate, and though it will soon become putrid and change into a heap of maggots, and give out a smell almost unendurable, it must not be removed. The filth contracted by those engaged in the work, must not be washed off until all is over; that is, till all the fish are boiled, and this will take about two or three weeks. All these plans must be carried out without any addition or change, otherwise the fish will be *ashamed* (the Indians think), and perhaps never come back again."

quest among the Hudson Bay Company's traders and other old residents on the coast. The Indians dry vast numbers for winter use, and carry them with them in strings, during their annual migrations south, and for sale to other tribes who come to purchase them as well as oil. The *Tsimpsheans* say that the Naas river clothes them and the Skeena river feeds them, because the *Hydahs*, from the Queen Charlotte Islands, and other tribes who are prohibited from fishing for the *Oulachan* in the Naas, come and purchase the oil from them, paying blankets for it, while the salmon of the Skeena supplies them with abundant supplies of food. I cannot but think that these fish would form a most valuable and lucrative article of commerce either in the salt or dried condition, and that in either of these forms, or preserved in ice, or in their own olive oil, like sardines, they would command a ready market, especially in the Roman Catholic countries along the Pacific coast, in China, and even in Europe, and the Atlantic States of America. A small joint stock company was indeed formed in Victoria, in 1864, for that purpose, but failed for want of capital and in ignorance of the habits of the fish. Before they could get their affairs settled to start north, the season was past, and nothing further was ever done. The Indians, no doubt, declare that no white man shall ever cast a net into the Naas, but independently of this somewhat futile threat, supplies could be purchased from the Indians to almost any amount, and, if sufficient inducement were held out to them, the present catch could very easily be increased tenfold.

6. The oil is of even greater value than the fish itself, as usually seen in the opaque lard-like condition, and after having undergone no other preparation than the rough *trying out* just described, its taste is not unpleasant, and the odor by no means disagreeable. Even in this condition, it has been used by the whites for culinary purposes, and the Indians use it in all their meals, much after the same way as we do butter, using it also as a sauce to their dried salmon. So fond are they of it, and so essential to their health is it (as I shall presently refer to), that the Hydahs and other tribes, as I have already said, come over to purchase it eagerly, and the Hydahs, Stekins, Tsimpsheans, and other northern tribes that winter in Victoria and Puget Sound, will come on board the Metlakathlah mission schooner to purchase it. They complain of the price, but still cannot do without it. An old Tsimpshean once said to me, "I can buy beef and bread cheaper, but my heart never feels good until I have got this grease. There are just two sweet things

in food—*rum* and oulachan oil!" However much we may be inclined, from a civilized stand-point of view, to doubt the soundness of this summation of a lifetime's experience, there is no doubt that this oil, both in an edible and *medicinal* light, is of the utmost value. It is the latter property which the readers of the present article will be most interested in, and which I desire most earnestly to press upon their attention. Its effects on phthisical patients are most wonderful, and, from the moist climate of the northern portions of the Pacific coast, the natives are very subject to phthisis, hæmoptysis, and other forms of pulmonary disease. As it is, many die annually of these complaints, and I believe that I only speak the opinion of all who know these people, or who have thought over the subject, that were it not for this oulachan oil, these northern tribes, once so powerful, and still so courageous, intelligent, and physically fine, would be decimated, and already enfeebled in constitution through vices learnt from the whites, their extermination would soon be *un fait accompli*. It relieves violent coughs in a most remarkable manner, and equally conduces to the accumulation of flesh. In a word, it has all the properties of cod-liver oil and other fish oils in an intensified degree, without their nauseous taste—a taste which is found even in the best and most carefully prepared oils, and prohibits many availing themselves of their valuable qualities. I have known delicate ladies who would have vomited at the smell of the ordinary cod-liver oil, put the bottle of oulachan oil (slightly heated, in order to liquefy it) to their mouths, and drink it without the smallest nausea! If the oil thus rudely prepared by the natives be so little unpalatable, I doubt not but that if it underwent the usual refining processes of the chemist, that it might be produced perfectly tasteless. The old fur traders on the coast everywhere use it in pulmonary diseases, and even send supplies of it into the interior, for the use of friends residing there. It is looked upon almost as a specific, and the few boxes which the Hudson Bay Company's trading vessel brings down on her annual spring voyage (not as an article of commerce, but for the accommodation of friends,) are generally bespoke long before. The medical officers of the Company have long preferred prescribing it to cod-liver oil, both in their own families and in general practice. One of these gentlemen, whose great intelligence and long experience entitle his opinions to every respect,* enter-

* I believe I am at liberty to mention his name. The Honorable John Sebastian Holmecken, Chief Trader and Surgeon H. B. C., Member of the Legislative Council of British Columbia, and formerly Speaker of the Legislative Assembly of Vancouver Island.

tains very similar views to those I have advocated, and I have, moreover, heard him attribute the health and even the existance of the Indians during their exposed life in a *hyperpluviose* climate like that of Fort Simpson and north to Sitka, to the use of oulachan oil. In the course of my journeys into the interior of Oregon and elsewhere, I had occasion to recommend and procure some for friends troubled with phthisical complaints, and in every instance I have heard its merits extolled to the highest degree.

7. The object of this paper has been to draw the attention of pharmaceutists to this oil, and with a view to its being tried in a medicinal and commercial way. In 1864, some specimens were sent to England, and became rancid before arriving, though even in that condition they were valued at the rate of £40 per ton; but I am not aware that it has ever yet been tried in European medicinal practice. I have no doubt that if efforts were made to procure a sufficient quantity to give it a proper trial at the hands of physicians, whose opinions would carry weight with them, the *Oleum Osmeri* would prove a useful addition to our animal Materia Medica, as auxiliary to, or substitute for, the better known and justly esteemed *Oleum Jecoris Aselli* of the Pharmacopœia."

THE PATHOLOGY OF PARALYSIS WITH MUSCULAR DEGENERATION (PARALYSIE MYOSCLÉROTIQUE).

By Dr. DUCHENNE, of Boulogne. Communicated to the Pathological Society of London by Mr. LOCKHART CLARKE, F.R.S.

The clinical facts which serve as a basis for studying the symptomatology of the disease show that paralysis with degeneration (*sclerosie*) of muscles, or with apparent hypertrophy of muscles, is marked, in general, by three distinct periods or stages—a stage of paralysis, a stage of hypertrophy, and a stage in which the paralysis becomes general.

1. The first stage is manifested either at the time when the children should begin to walk, or some years after they have begun. In the former case, although the conformation of these children be quite normal, and although, while lying down or in the arms of their mothers or their nurses, they appear to possess their natural share of mobility, yet, when they arrive at

the age of twelve or fourteen months, if an attempt be made to stand them on their legs, they immediately fall down. It is not until they have attained the age of two or three years that they are able to stand upright or to walk, and even then they require support. In the latter case, after these children have walked well for several years, it is remarked that, either spontaneously or subsequently to some convulsions, they are soon fatigued by standing or walking; that, without some support, they find these operations become more and more difficult and painful, and that they are subject to frequent falls. Whatever may have been the age at which the malady first made its appearance, it is soon observed that, in order to maintain their equilibrium while standing or walking, all these children bend themselves very much backward and keep their legs very much apart; that at each step they incline laterally towards the leg which rests on the ground—a movement which produces a characteristic balancing of the body during progression.

2. The second stage is announced, in general, some months, and even two years, after the beginning of the muscular weakness, by a progressive swelling or enlargement of the gastrocnemii, then of the glutei and the lumbar muscles of the spine. This apparent hypertrophy occurs sometimes in nearly all the muscles that have been affected by paralysis; but, in general, it does not, and it may even be limited to a very small number of the muscles. The extension, to a greater or less extent, of the apparent hypertrophy of the muscles may constitute different varieties of this kind of paralysis. The hypertrophied muscles are firm and elastic; they become very hard while they contract, and show all the relief or projection which properly belongs to their contracted state; they then appear to form a hernial protrusion through the integument, which is very thin. Moreover, their great size shows off the apparent smallness and delicacy of the joints at the knee, ankle, etc.

In one case that came under my observation, both the weakness and the muscular hypertrophy appear to have shown themselves simultaneously. According to the information given by the mother, the child was very large at its birth. But this information is insufficient; we ought to know whether the great size of the body and of the limbs was or was not due rather to the abundance of subcutaneous adipose tissue than to the volume of the muscular masses.

The increase in the size of the muscles does not appear to add to their weakness. This is so far from being the case, that the muscles of the calves, which are always the most hypertro-

phied, are those which are found to have relatively the greatest power.

The morbid phenomena above described may remain in the same state for years—sometimes until a tolerably advanced period of youth.

A new stage of the disease, and the last one, is manifested by a gradual increase in the severity, and a more general extension, of the paralysis. The young patients can no longer stand upright; they always remain in the recumbent posture, without any power to change the position in which they may be placed; and the upper extremities, if they have not hitherto been affected, soon lose all their movements. With this aggravation of the paralysis, hypertrophied muscles may sometimes be seen to melt, as it were, away, and then all the limbs and the trunk become atrophied *en masse*. Although in this stage the patients are reduced to a state of great weakness, they may nevertheless live for a tolerably long time. They are cut off by some intercurrent disease.

Mr. Clarke adds:

Dr. Duchenne informs me that he has been studying this disease for the last eleven years, and is now preparing a small work on the subject. Several cases have been recorded on the continent, and *post mortem* examinations have been made. Eulenburg and Cohnheim examined the body of a child which died of this disease at the age of thirteen. They found the electro-muscular contractility everywhere intact. Nothing abnormal was discovered in the nervous and vascular systems. To the touch, the muscles of the lower limbs gave the sensation of a doughy and inelastic mass. They were marked with stripes or striæ of a yellow or yellowish-white appearance. On section, they shone with a kind of greasy light. At certain points they could not be distinguished by the naked eye from the subcutaneous adipose tissue. The muscles of the upper extremities presented a similar kind of structure; but they were much atrophied, as were also those of the trunk. Under the microscope, those especially of the lower extremities seemed to be filled with adipose tissue; but the muscular tissue itself was not altered. Griesinger and Billroth had already observed a similar state in the living subject. It is rare, however, to find any oily particles in them. (*Verhandl. d. Berliner Med. Ges., 1, 101-205.*) Heller, who examined two brothers that died of this disease, seems to consider it as a kind of fatty degeneration, for he calls it lipomatus. (*Deutsches Archiv f. Klin. Med., 1, 616-627.*) Seidel, also, records three cases belonging to the same family,

under the term of "lipomatous atrophy of the muscles, or muscular atrophy."—*British Medical Journal*, Dec. 14, 1867.

(Since the date of this communication, the article promised by Duchenne has been published in the *Archives generales de Medicine*, Jan.–May, 1868.)

A MODIFICATION OF THE CLINICAL THERMOMETER.

Presented to the Medical Society of the Hospitals of Paris, by M. HERARD.

At this time, when thermometrical researches are in vogue, I thought that the Society would receive with interest the modifications of the thermometer, used as a means of ascertaining the temperature of the body in disease. The instrument is constructed by MM. Alvergniot frères, under the instructions of M. Niederkorn, a pupil attached to my service.

The instrument which I present contains mercury, with calibre equally and carefully prepared, with a fractional scale, and graduated on glass, by degrees and tenths of degrees. It is "*maximum in all directions, with a permanent bubble of air*," not requiring any manipulations to prepare a maximum, nor any calculation for the reading. The constructor has broken the column of mercury, by the introduction of a very fine bubble of air, above which a fraction of the column remains, serving as an index, and occupying about ten divisions. The instrument is about the size of an ordinary lead pencil; it is about six inches in length, of which three are occupied by the reservoir. The reservoir alone is blown; the body is plain, except the capillary tube, which passes longitudinally through its centre, giving to the instrument all the solidity the material will admit of.

The inferior half of the instrument is not graduated. The superior half is graduated between 34° and 42° (Cent.). This scale suffices for ordinary cases, but it can be made, on the same system, to meet any requirements.

When the index is below the temperature we think we ought to obtain, there is nothing to do but put the instrument in position; if, on the contrary, a preceding observation has shown the index, we must preliminarily arrange the index below the expected temperature, which is accomplished by slight shakings of the instrument.

After two or three minutes, when the equilibrium of tempera-

ture has become established, withdraw it, and the reading is very easily accomplished. "*The index remaining fixed by capillary adhesion at the highest point of the course through which it has just passed.*" The instrument has been so graduated that in order to appreciate exactly the temperature, it is only necessary to read the division just above the level of the index. The scale having only been constructed for ordinary diseases, it is not very long. The divisions have consequently been given in tenths, so as not to make the size inconvenient. By employing mercury, the exact calibre of the tube, and graduation on glass, the skilful operator has been enabled to produce very precise instruments, the sensibility of which is due to the form, to the small capacity of the reservoir, and above all, to the extreme capillarity of the tube. For more than two months M. Niederkorn has used it daily under my personal observation, and it performs with perfect regularity. In addition to its above-mentioned qualities, this advantage can be claimed for it over the ordinary instrument, viz., "*that the reading is no longer made on the patient, and can be deferred.*" Thus it is always exact and convenient, despite its extreme capillarity, because we can always seek the most favorable spot for the reading where the light is strongest.

With the instrument in use to-day, we meet with inevitable causes for cooling the instrument; for we must either leave a portion of the body of the instrument exposed to the air in maintaining an opening between the skin and clothing during the entire observation, or place the reservoir in the axilla, the entire body applied along the side by means of the arm, and carefully cover the patient. This procedure gives a just equilibrium, but at the moment when we wish to ascertain the temperature, we uncover the patient in order to bring the body in sight, and then we expose ourselves to the same causes of error as before. These objections disappear in employing this method of the maximum thermometer; for once the equilibrium is registered, it can not change, grace to the index. Thus disappear also, in great part at least, the reasons given generally for preferring the rectal temperature in hospital practice.

To place the instrument in position and withdraw it is a manœuvre so simple, that the patient himself or any one of his family can perform it without any chance of error. Then it can be applied without any trouble on the most modest lady without shocking her delicacy.—*S. H. Frazer.—L'Union Medicale*, 1868.

CASE ILLUSTRATING THE NATURE OF EPILEPSY.

By Prof. L. MAROWSKY, of Charcow, Russia.

This case is reported as a further contribution to the researches of Dr. Nothnagel (cf. p. 67 of this volume) concerning the origin of the epileptic attack, and the author is of opinion that it proves beyond controversy that many, if not all, forms of epilepsy are owing to a spastic contraction of the cerebral arteries; in other words, that epilepsy is a *vasomotor neurosis of the brain*. The arterial spasm may be induced by various causes, either directly or by reflex action; hence the multifarious forms and modifications of the disease. Whenever these causes are known, or discovered *post mortem*, we speak of "symptomatic epilepsy;"—when they remain unknown, we call the disease "essential" (idiopathic) epilepsy.

The case is that of a cadet, æt. 16, with a moderate phlegmonous inflammation extending from the left ala of the nose to the middle of the left cheek. The young man was naturally very excitable, nervous, but of strong build and in good condition. The tumor was very painful, at the circumference hard and red; the centre was dark-red, almost livid, and showed fluctuation so distinct as to indicate the propriety of opening the abscess. This little operation was performed immediately, the patient standing. A small, but sufficient, opening had scarcely been made with a sharp lancet, when the skin immediately around the incision, which had been dark-red, became perfectly white. This white margin rapidly extended farther and farther, all of the red inflamed surface became as white as chalk, the patient became restless, his pupils dilated and his countenance grew pale; he fell, lost consciousness, and, after a slight tetanic contraction, was attacked with clonic convulsions of the face, hands, and feet, and foaming at the mouth. After a half or at most one minute, the convulsions ceased, the patient became quiet, his face reddened, the pulse, which had been slow, contracted and tense, became frequent and easily compressible, the skin moist, and after five or ten minutes the patient awoke, remembered nothing of the accident, and for the rest of the day remained depressed, feeble, and incapable of mental exertion.

The author supposes that he had caused, by the incision, a reflex spasm of the cerebral arteries, leading to general anæmia of the organ, which then caused convulsions and loss of consciousness. The tonic contraction of the cerebral vessels must have been general, affecting the base as well as the periphery,

because loss of consciousness occurred simultaneously with general tonic and clonic convulsions.

The patient has been under observation for two years since this occurrence, but never had a second attack; nor had he ever suffered from an epileptic attack previously, though he had always been very irritable as a boy.—*Deutsches Archiv f. klin Med.*, vol. iii., p. 615. 1867.

LIQUEFYING LAUGHING GAS.

The uniform efficiency and safety of laughing gas as an anæsthetic has prompted *The British Medical Journal* to suggest that a bottle be made strong enough to hold the gas in a liquid form, and of such weight and dimensions that it may be easily carried by the surgeon in his daily rounds. At present it is used by dentists from large gas-bags, into which it is placed as soon as made. Laughing gas is composed, according to the new notation, of two atoms of nitrogen and one of oxygen. These two elements are the principal constituents of common air. Laughing gas or nitrous oxyde can be liquefied under a pressure of 750 pounds per square inch when at the temperature of 45° Fahr. The most convenient and safe receptacle for the liquid would be a brass or copper tube, not more than a foot in length, and of such thickness as to resist a pressure of at least 1500 pounds, or several tubes of the ordinary thickness might be united side by side and made entirely safe.

To get the nitrous oxyde gas into a portable shape, is certainly "a consummation devoutly to be wished."

Book Notices.

Vesico-Vaginal Fistula from Parturition and other Causes: With Cases of Recto-Vaginal Fistula. By Thomas Addis Emmet, M.D., Surgeon-in-Chief to the New York State Woman's Hospital, etc., etc. New York: William Wood & Co. 1868. For sale by W. B. Keen & Co.

This is an octavo volume of 250 pages, good paper, fair type, and good binding. It is a very interesting monograph on the

subject of vesico-vaginal fistula; embracing the causes, nature, and best methods of treating this class of injuries. It contains cuts representing the various instruments used, the position of the fistula with the sutures introduced, and many illustrative cases. It is a valuable addition to our literature.

Diseases of Children. A Clinical Treatise based on Lectures delivered at the Hospital for Sick Children, London. By Thomas Hillier, M.D., London, Fellow of the Royal College of Physicians, Physician to the Hospital for Sick Children, etc., etc. Philadelphia: Lindsay & Blakiston. 1868. For sale by S. C. Griggs & Co. Price, $3.00.

This is a neatly-published octavo volume of 400 pages. The author treats of the following diseases:—Pneumonia; Lobar Pneumonia; Pleurisy; Rickets; Tuberculosis; Diphtheria; Acute Hydrocephalus and Meningeal Tubercle; Chronic Hydrocephalus, Tubercle of the Brain, and other Cerebral Affections; Pyæmia and Ottorrhœa; Chorea; Paralysis; Ascites; Scarlatina; Typhoid Fever; Skin Diseases; Epilepsy and Convulsions; with an Appendix giving formulæ for medicines in children. We have not had time to examine the work sufficient to express an opinion of its merits.

Atlas of Venereal Diseases. By A. Cullerier, Surgeon to the Hospital Du Midi; Member of the Surgical Society of Paris, etc. Translated from the French, with Notes and Additions, by Freeman J. Bumstead, M.D., Professor of Venereal Diseases in the College of Physicians and Surgeons of New York, etc. With about 150 beautifully-colored Figures on twenty-six Plates. Philadelphia: Henry C. Lea. 1868.

Part four of this valuable work is before us. One more part completes it. We gave a pretty full notice of its merits on the reception of the first parts, and now repeat the recommendation then expressed.

Archives de Physiologie Normale et Pathologique Publiées, par MM. Brown-Sequard, Charcot, Vulpian. No. 5, Septem-

bre–Octobre, 1868. Paris: Victor Masson et Fils, 17 Place de L'École-de-Médicine.

This is the fifth number of the Archives of Physiology, both Normal and Pathological, published in Paris, by Brown-Séquard, Charcot, and Vulpian. It is a regular periodical issued every two months; and for such as read the French language readily, it is a most valuable work.

The Diseases Peculiar to Women, including Displacements of the Uterus. By Hugh L. Hodge, M.D., Emeritus Professor of Obstetrics and Diseases of Women and Children, in the University of Pennsylvania. With Illustrations. Second Edition, revised and enlarged. Philadelphia: Henry C. Lea. 1868.

This is an elegantly-published work of over 500 pages; containing the results of the study and observation of one who holds a high rank among the practitioners and teachers of Obstetrics and Diseases of Females, and who has been an active laborer for more than 40 years. This work is arranged in three parts:

The first treats of diseases of *Irritation;* embracing nervous irritation and its consequences, and irritable uterus.

The second treats of Displacements of the Uterus.

The third treats of "Diseases of Sedation;" under which title the author embraces Amenorrhœa and Chlorosis.

Without either criticising or commending all the views presented by the author, we say to our readers, the work is one that will amply repay them for a careful perusal. It is, indeed, one of the most valuable contributions to our medical literature. For sale by S. C. Griggs & Co., Chicago. Price, $4.00.

The Science and Practice of Medicine. By William Aitken, M.D., Edinburgh, Professor of Pathology in the Army Medical School. Second American, from the fifth, enlarged and carefully revised, London Edition. Adopting the new Nomenclature of the Royal College of Physicians of London. With large Additions, by Meredith Clymer, M.D., Ex-Professor

of the Institutes and Practice of Medicine in the University of New York; formerly Physician to the Philadelphia Hospital, etc., etc., etc. In two Volumes, with a Map, Lithographic Plate, and numerous Illustrations on Wood. Philadelphia: Lindsay & Blakiston. 1868. Price, $12.00.

On the appearance of the first American edition of this work, we commended it to our readers, as the most complete and reliable embodiment of the present status of Practical Medicine in Great Britain that had yet been published. The speedy call for a second edition shows that its merits have been extensively appreciated by the profession in this country. In the present edition, the author has added some new chapters, and the American Editor some two or three hundred pages of matter on important topics. It is altogether such a work as the intelligent practitioner will be reluctant to do without.

Criminal Abortion: Its Nature, its Evidence, and its Law. By Horatio R. Storer, M.D., LL.B., Fellow of American Academy of Sciences, and late Professor of Obstetrics and Medical Jurisprudence in the Berkshire Medical College; and Franklin Fiske Heard. Boston: Little, Brown & Co. 1868.

This is a neatly-published octavo volume of 215 pages. It presents the statistics, nature, and medical jurisprudence of criminal abortion, in an interesting style, and with a fulness of detail, that makes it a valuable work for members of both the medical and legal professions. We know of no other source from which so much information, both medical and legal, can be obtained on this subject, as from this book.

Glycerine.—The solvent power of glycerine upon several substances commonly used in medicine and the arts, is as follows: One part of sulphur requires 2000 parts of glycerine; iodine, 100 part; red iodide of mercury, 340 parts; corrosive sublimate, 14 parts; sulphate of quinine, 48 parts; tannin, 6 parts; veratria, 96 parts; atropia, 50 parts; tartar emetic, 50 parts; iodide of sulphur, 60 parts; iodide of potassium, 3 parts; sulphide of potassium, 10 parts.—*Med. and Surg. Reporter.*

Editorial.

The regular course of Clinical instruction in the Mercy Hospital was resumed after the summer vacation, on the first Wednesday in September, and a class of good students have been regularly in attendance since. The regular clinics in the County Hospital commences on Friday, October 2d, and will be continued until next summer. The Rush Medical College commenced its regular annual lecture term on Wednesday, September 30th; and the course in the Chicago Medical College commences on Monday, October 5th. Chicago has become as truly a great centre for medical education, as for commerce.

In another part of the present number of the Examiner, we take the liberty to publish, entire, the Semi-Annual Report of the Surgical Institute at Jacksonville. In the paragraph relating to chronic ophthalmia, the author of the Report wishes a correction made, so that the second sentence shall read thus: "The division of the ciliary bands as practised by Mr. Hancock of London, and recommended by Dr. J. S. Hildreth of Chicago," etc.

Transactions of Ill. State Med. Society.—The annual volume of the Transactions of the Eighteenth Anniversary Meeting of the Illinois State Medical Society has been issued, and copies mailed to all the Members whose annual assessment for 1868 has been paid. If any fail to receive them they will please notify the Secretary, Dr. N. S. Davis, Chicago, Ill.

The present volume contains 112 pages, and is illustrated by several neatly executed cuts.

It contains reports on Chronic Inflammation of the Hip-joint, by Dr. R. G. Bogue, of Chicago; on Spinal Curvatures, by Dr. F. O. Earle, of Chicago; on Improved Form of Endoscope, by Dr. E. Andrews, of Chicago; on the Pathology and Treatment of Epidemic Cholera, by Dr. N. S. Davis, of Chicago; on Ophthalmology, by Dr. H. H. Roman, of Springfield, Ill.; on Ob-

stetrics, by Dr. E. W. Moore, of Decatur, Ill.; and short papers by Drs. Holmes, of Chicago, E. P. Cook, of Mendota, and D. Prince, of Jacksonville.

Action of Caffein.—According to the experiments of M. Leven, as published in the *Archives of Physiology*, for Jan.–Feb., 1868, Caffein is a direct stimulant or excitant of nervous sensibility and action. Soon after its administration, the pulse is increased in frequency and force; respiration is accelerated; the muscular system contracts more vigorously, and secretions generally are moderately increased. It does not appear to be digested or appropriated in the system, but is readily elimenated within a few hours after it is taken.

Medical Depart. of the Cumberland University.—We have received a slip, by which we learn that a new Medical College with the above title has been organized in Nashville, Tenn.; and will commence its first regular course of instruction on the 2d of November next. *Prominent* as members of the Faculty, we notice the names of Paul F. Eve and Thomas R. Jennings, who recently retired from the faculty of the Medical Department of the University of Nashville, and E. S. Gaillard, late of the Richmond Medical College.

Louisville and Richmond Medical Journal.—A few months since, at the request of the Editor of the Journal just named, we inserted a paragraph stating that our subscribers could also be supplied with the *Louisville & Richmond Medical Journal* for $3,00 per annum. Since that time, the commutation arrangement has been discontinued, on account of the enlargement of that Journal. It is one of the largest and best monthly medical journals in the country, with a regular subscription price of $5,00 per annum.

Advertising.—We are often applied to by advertising agents and others for our terms of advertising, not only medical books, appropriate cards of pharmaceutists, druggists, etc., but all sorts of medical compounds, goods, wares, and merchandize.

We wish to inform all parties that the EXAMINER is intended to be a periodical devoted to medical science and education, and not a news board, with our name at the top, under which anyone can write their own puffs, or stick their own handbills, on the payment of a certain number of dollars. Our notions of professional obligation and propriety, will no more permit us to furnish the medium for heralding such advertisements as "Hunnewell's Eclectic Pills," "Hunnewell Tolu Anodyne," "Hygienic Wine," "Juniper Tar Soap," "Fourgera's Pectorial Paste," "Hoff's Malt Extract Beverage of Health," and a score of others, than to order them in prescriptions for our patients.

Neither will we encourage pharmaceutists to make up all sorts of combinations of medicines not officinally recognized in the pharmacopia. The combination of medicines adapted to the wants of each patient is one of the most delicate and important duties of the physician; requiring as much accuracy of judgment as the determining of the pathology or diagnosis of the case. The whole tendency of the use of such mixtures as "Elixir Calasaya, Iron, and Bismuth;" "Elixir Pepsine, Strychnia, and Bismuth," etc.; is to induce the practitioner to forego all adjustment of the quantity of each remedy to the special wants of each case. It equally tends to destroy all uniformity of the therapeutic experience.

If one practitioner uses the incongruous mixtures of one manufacturing house; another uses those of another house; and a third uses the medicines and formulas recognized as officinal, and each reports the results of his practice in a given disease, how are we to compare the results? Let pharmaceutists exercise their skill in giving us pure articles of medicine; in separating the active principles from the crude and inert parts; in making such combinations of the active principles as are truly chemical; and in putting the individual medicines into compact and palitable form for administration, and we will cordially aid them in their work. But let them leave the business of combining medicines designed for this or that disease or class of diseases entirely to the practitioner, at the bedside of his patient.

Mortality Report for the Month of August:—

CAUSES OF DEATH.

Accident, drowned	4	Convulsions	65	Hemorrhage, internal,	2
" burned,	2	" diarrhœa,	3	Hemoptysis,	1
" fall of derrick	1	" enteritis	1	Hepatitis,	1
" machinery,		" teething	5	Hernia strangulated	1
" railroad,		Croup,	5	Heart, disease,	3
" shot,	1	" membranous	1	Heart, valvular disease	1
" team,	1	Cynanche maligna	1	Hip, disease of	1
" upsetting cart	1	Cyanosis,	1	" contusion,	1
Abdomen, injury of,	1	Debility	5	Hydrocephalus,	16
" contusion,	1	Deficient development from injury	1	" chronic	1
Angoria following scarlet fever,	1	" vitality,	1	" acute,	4
Anæmia,	1	Diphtheria,	1	" chronic diarrhœa	1
Apoplexy,	3	" and scarlet fever,	1	" cholera infantum	2
Apthæ,	1	Diarrhœa,	60	" teething	1
Births, premature,	26	" chronic,	13	Inanition,	17
" still,	28	" and dysentery	1	Ileus,	1
" tedious	1	" convulsions	1	Injuries by falling in well,	1
Bowels, congestion of,	2	" diphtheria	2	Jaundice	5
" inflammation,	6	Dropsy,	3	Laryngitis,	2
Brain, congestion of,	4	" abdominal,	2	Liver, cirrhosis of	1
" congestion of and organic disease of heart,	1	" and general debility,	1	" congestion of,	1
" congestion of and croup,	1	Duodenum, cancer of	1	Lungs, congestion of	3
" congestion of and disease of spine,	1	Dysentery	45	" œdema of,	1
" disease of,	3	" acute,	2	Measles,	2
" " " and cholera infantum,	1	" and cholera morbus,	1	Metral insufficiency	1
" inflammation of,	6	" gastritis,	1	Meningitis	7
Bronchitis,	1	" typhoid,	1	" convulsions	1
" capillary,	1	" teething	2	" diarrhœa,	1
" and diarrhœa	1	Dyspepsia	1	" tuberculous	1
Breast cancer of,	2	Endocarditis	1	Mouth, canker sore of	1
Caries of spine and congestion of lungs,	1	Enteritis,	8	Old age,	5
Carbuncle,	1	Encephalitis,	5	" chronic diarrhœa,	1
Cellutitis pelvic,	1	Enterocolitis	10	Opium, overdose,	1
Cholera infantum,	266	Epilepsy	2	Palate defective,	1
" " diarrhœa	2	Erysipelas,	3	Parotitis and scarlet fever,	2
" " enteritis	1	" malignant	1	Paralysis, from sunstroke,	1
" " scarlet e	1	Exhaustion,	1	Peritonitis,	6
" " teething	6	Fever, congestive,	2	Pelvic and iliac cellular tissues suppuration of, from inflammation of caecum,	1
" " whooping cough,	4	" intermittent,	2	Pulmonum, ateleclasis	2
" morbus,	9	" puerperal,	2	Pneumonia,	10
" " and diarrhœa	1	" remittent	1	" and whooping-cough,	1
" " diptheria	1	" scarlet,	16	Phthisis, acute,	1
" " rheumatism,	1	" and angina,	1	" pulmonalis	41
Colic, lead,	1	" typhoid,	29	" rheumatism,	1
Childbirth	1	Gastritis	1	Phrenitis,	1
		" chronic	1		
		" and diarrhœa,	1		
		" and whooping cough,	1		
		Gastrœntrites,	5		
		Gout	1		

Purpa and cholera infantum,	1	Skull, fracture of,	1	Unknown,	2
Rheumatism, inflammatory,	1	Tabes mesenterica,	39	Vitality, deficient,	1
Stomach, cancer of,	2	Tetanus,	1	Whooping-cough,	10
" inflammation	1	Teething,	37	" " convulsions	1
" ulceration and hemorrhage	1	" and diarrhœa	6	" " diarrhœa	1
" " from	1	" hydrocephalus	1	" " pneumonia	2
Suicide,	3	Trismus	1	" " typhoid fever,	1
		Throat, cancer of,	1		
		Uræmia,	1		
		Uterus, cancer of,	1	Total,	943

COMPARISON.

Deaths in Aug., 1868, 943 | Deaths in Aug., 1867, 697 | Increase, 246

Deaths in July, 1868, 897 | Increase, 46

AGES.

Under 5	733	40 to 50	41	90 to 100	0
5 to 10	25	50 to 60	12	100 to 110	1
10 to 20	21	60 to 70	20	Unknown	2
20 to 30	49	70 to 80	6		
30 to 40	30	80 to 90	3	Total	943

Males, 511 | Females, 432 | Total, 943

Single, 841 | Married, 102 | Total, 943

White, 936 | Colored, 7 | Total, 943

NATIVITY.

Chicago	643	England	5	Scotland	4
Other parts U. S.	101	Germany	82	Sweden	15
Austria,	2	Holland	2	Switzerland	2
Bohemia	9	Ireland	45	Unknown	3
Canada	6	Norway	16	Russia,	1
Denmark	2	Poland	1		
Nova Scotia,	1	Wales,	1	Total,	943
New Foundland,	1	Italy,	1		

MORTALITY BY WARDS FOR THE MONTH.

Ward.	Mortality.	Pop. in 1868.	One death in		Ward.	Mortality.	Pop. in 1868.	One death in	
1	13	11,991	922		14	70	14,168	202	1-3
2	28	13,739	490	3-5	15	72	20,429	280	1-3
3	45	16,620	369	1-3	16	41	16,011	393	
4	33	16,499	497		Bridewell,	1			
5	63	13,434	213	1-4	County hosp.	19			
6	62	12,507	201	3-4	Chi. River,	2			
7	113	21,957	193	7-8	Mercy Hosp.	4			
8	60	14,003	233	1-3	Police Stat.	1			
9	45	18,050	401	1-6	Protes. Orphan asylum,	2			
10	29	13,644	470	1-2	Lake Michi.	3			
11	49	13,317	271	3-4	Immigrants	34	St. Joseph's Orph. As.	1	
12	71	14,739	209				Home for Friendless,	6	
13	76	11,113	146	1-5					

Total, 943

Deaths.—The daily papers of St. Louis announce that on the 25th inst. (September) Joseph N. McDowell, M.D., of that city, died from congestive chills, aged 63 years.

Dr. McDowell had long occupied a prominent position, as a surgeon and teacher, in the profession. He was a man of great talents and remarkable eccentricities.

Clinical Lectures on Diseases of the Eye and Ear at the Chicago Eye and Ear Infirmary.—The Sixth Course of Lectures at the Infirmary, by Dr. E. L. Holmes, will commence on Monday, October 5th, at half-past 1 o'clock P.M., and will continue 20 weeks, on such days and at such hours as may be most convenient to those who attend.

No Institution in the North-West affords the student and practitioner superior opportunities for the clinical study of all forms of ophthalmic diseases, and their medical or surgical treatment.

During the past twelve months more than 800 patients received the benefits of the Institution.

During the last Course there was an average daily attendance of 40 patients, a large number of whom required important surgical operations.

Excellent opportunities will be afforded for studying each case and comparing it with other cases. The abnormal condition of the various tissues of the eye will be illustrated, not only by the cases under treatment, but also by numerous plates and a large number of pathological specimens.

The Tickets for the Course of 20 weeks will be $5.00 each. The fees will be devoted to the support of the Infirmary.

Sept. 12, 1868, 16 East Pearson St.

Money Receipts to Sept. 26th.—Drs. David B. Taylor, $3; H. L. Butterfield, 3; G. W. Rohr, 3; L. Tibbits, 3; W. H. Crawford, 1; T. D. Washburne, 3; W. H. Mussey, 12.

TO PHYSICIANS.—Prof. Horatio R. Storer will deliver his fourth private course of twelve lectures on the Treatment of the Surgical Diseases of Women, during the first fort-

night of December, with illustrative operative instruction at the Franciscan Hospital for Women, under his charge.

Fee $50, and Diploma required to be shown. Certificates of attendance upon the previous courses have now been issued to twenty-nine gentlemen in different parts of the country.

Hotel Pelham, Boston, Sept., 1868.

Curability of Consumption. Case of President Jeremiah Day.—President Day, of Yale College, died in August, 1867, at the very advanced age of 95 years. He was an instance of what care and judicious treatment can effect in a disease often considered necessarily fatal. We take some of the facts of his life, and of the autopsy, from the *Trans. of the Connecticut State Medical Society*, reported by Professor S. G. Hubbard, M.D., of New Haven.

Jeremiah Day was born in Washington, Conn., August 2d, 1773; and during the war of Independence was old enough to appreciate the nature of the issue involved in that struggle, and well remembered having seen some of the principal actors in it.

His infancy and boyhood were marked by indications of feeble vitality; and the prospect of his arriving to the maturity of manhood, never very flattering, sensibly diminished as he approached that period. He entered the Freshman class in Yale College in 1789, but was soon obliged to leave college on account of a "pulmonary difficulty," which was, doubtless, the incipient stage of the organic disease of the lungs, which subsequently developed itself. These symptoms were so far alleviated, that for two years he taught a school in Kent and Winchester, when he found his health so much improved that he returned to college, and was graduated in the class of 1795.

The succeeding six years, a period of great feebleness, were spent partly in teaching at Greenfield for a year, as tutor in William's College for two years, and as tutor in Yale College for three years, during which last period he studied Theology, and preached occasionally in vacant churches in the vicinity, until 1801, when he was elected Professor of Mathematics and Natural Philosophy in the College.

He was prevented, however, from entering upon his professional studies, by the occurrence of an alarming pulmonary hemorrhage, which happened after a Sabbath service at West Haven, where he preached for the Rev. Dr. Williston. Other hemorrhages followed, by which he was greatly prostrated, losing large quantities of blood. According to the prevailing practice at that time, he was freely bled from the arm—"the

doctors taking," as he remarked to me, "nearly all of the little remaining blood in his body."

In this condition of extreme exhaustion, at the age of twenty-eight, he abandoned temporarily the purpose of entering upon the duties of his professorship, and in September of that year, he made a voyage to Bermuda, to try the effect upon his health of warm climate. While there he was treated with tincture digitalis to the extent of producing its culmulative effects, which were so profoundly sedative, that for a time his life was despaired of. Indeed so reduced and attenuated was he on leaving home, that none of his friends expected to see him again alive, and the published letters of Professor Kingsley and others of that period, lament him as already lost to science and the world. He returned, however, in the following April, but without having experienced any material benefit; so that he now gave up all idea of fulfilling his collegiate appointment; and bidding farewell to his associates, he retired to his home among the hills of Washington, to die.

The hemorrhages continued, and were followed by venesections, until a Dr. Sheldon, of Litchfield, who enjoyed a wide reputation for "curing consumption," chanced to see him, and causually remarked that he needed Iron,"—and "he believed he could cure him."

Although the patient was evidently in a hopeless decline, he was placed under the care of Dr. Sheldon, who would seem to have been an acute observer, and in his knowledge of pathology and therapeutics, far in advance of his time. Under the use of preparations of iron with bark, and nutritious food, Mr. Day soon began to exhibit signs of returning strength and health; and in 1803, although he seemed to his friends literally like one raised from the dead, he was so far restored to health, as to be inaugurated as professor. From this time all symptoms of pulmonary disease disappeared, and did not return.

On opening the thorax, only a moderate quantity, perhaps a pint, of serum was found in both cavities,—the lungs were every where quite free from tubercular deposit, and in all respects healthy. In the apex of each lung, however, was found a dense, corrugated circular cicatrix, an inch and a half or more in diameter,—also a *third* cicatrix, on the left side of the left lung, a few inches below the apex, each involving such a depth of tissue, as to indicate that the vomicæ of which they were the remains, had been large and of long duration. Both lungs were slightly adherent at the apex.

Here then, was all that remained to mark the beginning, pro-

gress, and cure of a case of tubercular consumption, occupying *twelve years* in its period of activity, and with its incipient stage, dating back more than *three-quarters of a century.* A legible record, surpassing in interest and importance to the human race, those of the slabs of Nineveh, or the Runic inscriptions. —*Med. and Surg. Reporter.*

The Trustees of the Fiske Fund, at the annual meeting of the Rhode Island Medical Society, held in Providence, June 10, 1868, gave notice that no awards had been made on the questions proposed by them the past year.

They offer the following subjects for 1868:

1. Bromides, their physiological effects and therapeutical uses.
2. Cerebro-Spinal Meningitis, pathology and treatment.
3. "Grave's disease" (so called), pathology and treatment.
4. Carbolic Acid, its therapeutical effects and hygienic uses.

For the best dissertation on each of these subjects they offer a premium of one hundred dollars.

Every competitor for a premium is expected to conform to the following regulations, *viz.:*

To forward to the secretary of the Fiske Fund Trustees, on or before the first day of May, 1869, free of all expense, a copy of his dissertation, with a motto written thereupon, and also accompanying a sealed packet, having the same motto inscribed upon the outside, and his name and place of residence within.

Previously to receiving the premium awarded, the author of the successful dissertation must transfer to the trustees all his right, title, and interest in and to the same, for the use, benefit, and behoof of the Fiske Fund.

Letters accompanying the unsuccessful dissertations will be destroyed by the trustees, unopened, and the dissertations may be procured by their respective authors, if application be made therefor within three months.

Address,

S. Aug. Arnold, M.D., Providence,
Secretary of Fiske Fund Trustees.

At the annual meeting of the Committee on the Boylston Medical Prize Questions, on the first Wednesday in June, 1868, it was announced that no dissertation had been presented on either of the questions proposed.

The following questions are proposed for 1869:

1. Food in Disease, acute and chronic; its variety, advantages, dangers, and relation to appetite.

2. The Surgical Treatment of Hemorrhoids, and the Surgical Treatment of Fistula in Ano, with its result.

The author of the best dissertation on either of the subjects proposed for 1869 will be entitled to a premium of one hundred and fifty dollars.

Dissertations on these subjects must be transmitted, postpaid, to John Jeffries, M.D., on or before the first Wednesday in April, 1869.

The following are the questions proposed for 1870:

1. The Modern Pathology of Tumors.

2. Aphasia, or the Relation of the Brain to Speech.

Dissertations on these subjects must be transmitted as above, on or before the first Wednesday in April, 1870.

The author of the best dissertation considered worthy of a prize, on either of the subjects proposed for 1870, will be entitled to a premium of two hundred dollars.

Each dissertation must be accompanied by a sealed packet, on which shall be written some device or sentence, and within which shall be enclosed the author's name and residence. The same device or sentence is to be written on the dissertation to which the packet is attached.

The writer of each dissertation is expected to transmit his communication to the President, John Jeffries, M.D., in a legible handwriting, within the time specified.

M. Nelaton.—The elevation of this eminent surgeon to a Senatorship by Napoleon III. has excited more than usual interest, inasmuch as it was stated to be the more honorable, not being accompanied by the condition that he should retire from the practice of his profession, as was the case when the same honor was offered to M. Double by Louis Philippe. It would appear, from the following statement by M. Latour (*Union Medicale*), that there is some doubt about this matter; and he gives a correct version of the anecdote about Double. Double was the friend and physician of Marshal Soult, and it was at his request that Louis Philippe consented to create Double a peer, on the condition, however, that he give up practice. The Marshal took the nomination to Double himself, and stated the condition attached to it. Double was very rich, approaching the end of his career, of simple, or even austere, habits; and certainly the desire of gain, and of the enjoyments obtainable by money, had no part in the resolution he came to. "Tell

the King," he replied to the Marshal, "I can submit to no conditions. If I am to enter the Luxembourg, it must be stethoscope in hand." This was too much for Louis Philippe, and the affair came to nothing. After all that has been said about the greater liberality manifested towards M. Nélaton by attaching no such conditions, it seems that he is to retire from practice! It is true that he has some time contemplated doing this, and has been withdrawing from consultations and operations; but it is very doubtful whether he would have received the nomination had this not been known to be the case. With respect to the immense income he is said to derive from his practice, M. Latour believes the statement that it amounts to 600,000 francs is a great exaggeration. Trousseau, at his most flourishing period, observed that there were but three practitioners in Paris whose income had sometimes exceeded 200,000 francs —*viz.:* himself, and MM. Nélaton and Ricord. However this may be, Nélaton's retirement, and the deaths within so short a space of time of men so largely consulted as Trousseau, Velpeau, Rayer, and Jobert, have placed immense opportunities within the reach of the rising practitioners.

The Physician's Visiting List.—This annual volume, issued by Messrs. Lindsay & Blakiston, has now reached the 18th year of its publication, and is so well known, and its usefulness is so generally recognized, that it is sufficient to announce that the List for 1869 has appeared, and may be obtained from all booksellers.—*Ibid.*

THE WOMAN'S MEDICAL COLLEGE

—OF THE—

NEW YORK INFIRMARY,

No. 126 SECOND AVENUE, N. Y.

FACULTY OF MEDICINE:

Dr. Godfrey Aigner, Professor of the Principles and Practice of Medicine.
Dr. Robert F. Weir, Professor of the Principles and Practice of Surgery.
Dr. Emily Blackwell, Professor of Obstetrics and Diseases of Women.
Dr. Samuel B. Ward, Professor of Anatomy.
Dr. G. H. Wynkoop, Professor of Physiology.
Dr. A. B. Ball, Professor of Materia Medica and Therapeutics.
Prof. Arthur Mead Edwards, Professor of Inorganic and Organic Chemistry.
Dr. Elizabeth Blackwell, Professor of Hygiene.
Dr. Lucy M. Abbott, Assistant to the Chair of Obstetrics, and Teacher of Clinical Midwifery.

BOARD OF EXAMINERS:

DR. WILLARD PARKER, Surgery.
DR. ISAAC E. TAYLOR, Obstetrics.
DR. AUSTIN FLINT, Principles and Practice of Medicine.
DR. STEPHEN SMITH, Anatomy.
DR. B. W. McCREADY, Materia Medica.
DR. A. L. LOOMIS, Physiology.
DR. SAMUEL ST. JOHN, Chemistry.
DR. C. R. AGNEW, Hygiene.

Occasional Lectures, on important specialties, will be delivered by the following gentlemen: DR. AUSTIN FLINT, DR. A. L. LOOMIS, DR. JAMES R. LEAMING, DR. HENRY D. NOYES, DR. GOUVERNEUR M. SMITH.

THE SESSION OF 1868-9

WILL OPEN NOVEMBER 2d, 1868, AND CONTINUE FIVE MONTHS.

The plan of instruction adopted in this Institution is progressive in character, requiring attendance at College during three sessions. Students in their first year will be occupied chiefly with the fundamental branches; working in the Anatomical Rooms, the Laboratory, and the Pharmacy; they will receive an outline of the other branches. In their second year, they will continue the same branches, in their higher departments, and receive full instruction in Medicine, Surgery, and Obstetrics. In their third year, the instruction in these three subjects will continue; and they will enter into Practical Medical Work, under the supervision of their Professors, and will review the fundamental branches Hygiene will be continued through the three years, and will be taught practically, as well as theoretically.

Examinations will be held at the close of each term, on the subjects therein taught; and a general examination will take place at the end of the third year.

It will be the aim of the College to make its students accurate observers, careful Practitioners, and thorough Hygienists.

The liberal sentiment of New York has opened to women the great City Hospitals and Dispensaries, with their admirable Clinical Lectures. Among these may be mentioned Bellevue Hospital, which receives annually from ten to twelve thousand patients, over five hundred being obstetrical cases; the Charity Hospital, which contains usually about one thousand patients, the large proportion being affected with chronic diseases; the Fever and Small-Pox Hospitals; the Hospital for Epileptics and Paralytics; the Nursery Hospital; the Insane Asylum; the New York Eye and Ear Infirmary; the Demilt, and other City Dispensaries.

THE NEW YORK INFIRMARY, also, with its long established practice, will place, annually, between six and seven thousand patients under the constant care and observation of its students, thus affording unequalled opportunities for Practical Medical Study.

Students desiring to pursue a specialty will find ample opportunity in this City.

FEES.

Matriculation Ticket	$5 00
Professor's Ticket	105 00
Demonstrator's Ticket	10 00
Single Ticket	15 00
Graduation Fee	30 00

College fees must be paid in advance.

For intelligent students, whose means are very small, every effort will be made to render the expense as light as possible. Communications from such students to the Secretary of the Faculty will be considered confidential, and meet with kind consideration.

Board can be obtained for $3 50 a week, upward.

A full term of lectures at any regular Medical School will be accepted as one of the sessions of this College.

For further particulars, apply to DR. E. BLACKWELL, Secretary of the Faculty, No. 126 Second Avenue, New York.

CHICAGO MEDICAL COLLEGE.

The regular Annual Lecture Term in this Institution will commence on the first Monday in October, and continue until the fourth Tuesday in March following. Clinical Lectures *daily* throughout the term.

FACULTY.

N. S. DAVIS, M.D., PRES'T OF FACULTY, 166 State Street,
Professor of Principles and Practice of Medicine and of Clinical Medicine.

W. H. BYFORD, M.D., TREAS. OF FACULTY, 62 State St.,
Professor of Obstetrics and Diseases of Women and Children.

EDMUND ANDREWS, M.D., SEC'Y OF FACULTY,
81 Monroe Street,
Professor of Principles and Practice of Surgery and of Military Surgery.

H. A. JOHNSON, M.D., 611 Wabash Avenue,
Professor of Diseases of Respiratory and Circulatory Organs.

C. GILBERT WHEELER, B.S.,
Professor of Organic Chemistry and Toxicology.

RALPH N. ISHAM, M.D., 47 Clark Street,
Professor of Surgical Anatomy and Operations of Surgery.

J. H. HOLLISTER, M.D., 30 Washington Street,
Professor of General Pathology and Pathological Anatomy.

THOMAS BEVAN, M.D., 81 Monroe Street,
Professor of Public Hygiene.

R. J. PATTERSON, M.D.,
Professor of Medical Jurisprudence.

J. S. JEWELL, M.D.,
Professor of Descriptive Anatomy

DANIEL T. NELSON, M.D., 169 Dearborn Street,
Professor of Physiology and Histology.

M. O. HEYDOCK, M.D., 92 Dearborn Street,
Professor of Materia Medica and Therapeutics.

C. GILBERT WHEELER, B.S.,
Professor of Inorganic Chemistry.

E. O. F. ROLER, M.D., 62 State Street,
Adjunct Professor of Obstetrics.

J. M. WOODWORTH, M.D., Lombard Block,
Demonstrator of Anatomy.

S. A. McWILLIAMS, M.D., 166 State Street,
Assistant to Professor of Anatomy.

JULIEN S. SHERMAN, M.D.,
Curator of the Museum.

NORMAN BRIDGE, M.D.,
Assistant to the Demonstrator of Anatomy.

FEES.

For the Winter Term, admitting to all the Lectures in the College,	$50.00
Graduation Fee,	20.00
Matriculation Fee,	5.00
Dissecting Ticket,	5.00
Hospital Ticket,	6.00

The Summer Reading and Clinical Term commences on the first Monday in April, and continues until the first Monday in July; and is free to all matriculated students of the College. Boarding, $3.50 to $4.50 per week. For further information, address

E. ANDREWS, M.D., *Sec'y of the Faculty.*

THE

CHICAGO MEDICAL EXAMINER.

N. S. DAVIS, M.D., Editor.

VOL. IX. NOVEMBER, 1868. NO. 11.

Original Contributions.

ARTICLE XLIV.

INTRODUCTORY LECTURE TO THE TENTH ANNUAL COURSE OF INSTRUCTION IN THE CHICAGO MEDICAL COLLEGE, October 5th, 1868.

By N. S. DAVIS, M.D., Professor of Principles and Practice of Medicine in Chicago Medical College, and of Clinical Medicine in Mercy Hospital.

Gentlemen:—It has become my duty, in behalf of the Faculty, to extend to you the customary greeting at the commencement of this, the Tenth Annual Course of Instruction in this Institution.

The occasion, though of annual recurrence, is nevertheless one of marked interest to each one of you. Each period of human life has its pains and its pleasures; its toils, its responsibilities, and its rewards. But none of these periods is more pregnant with importance than that which is more especially devoted to a preparation for the active duties of Life, usually called the period of pupilage. It is during this period that the young man not only acquires the knowledge which is to enable him to take his place among the active workers in society, but he also forms and fixes those habits, and develops those mental activities, that determine with much certainty both the position he shall attain in his calling, and the degree of his usefulness

in society. Hence, whatever relates to your habits, your mental discipline, and your acquisition of knowledge, now, is of vital importance in its bearing upon all the future of your lives.

If you spend this time in the mere passive reception of such facts and items of knowledge as may be presented to you, without critically examining each item and measuring its relations to all others, you may close your nominal period of pupilage with a show of knowledge, but without the mental discipline to apply it accurately, or the mental activity that continually demands an increase of acquisition. Your mental growth will, consequently, stop at the threshold of your professional career; and though such career should be extended over thirty or forty years, yet at the end you would be found still working on the same scanty collection of materials that supplied you the first year, and following out the same monotonous routine of practice in which you started.

These simple truths cannot be too strongly impressed on the mind of every young man entering upon the study of medicine with the intention of engaging in the active duties of practice. The extent of the field of medical sciences to be mastered; the number and variety of the conditions influencing human life and health, and the intricate nature of the questions involved in the diagnosis and treatment of disease, all demand of the medical student who would do justice, either to his calling or his conscience, a capacious, well-stored mind, disciplined to the highest degree of activity and exactness.

Yet it requires but a casual acquaintance with the great body of practitioners in our country, to perceive that their most prominent deficiencies, and most frequent embarrassments, arise directly from the defective development of the mental qualities just named. And this, again, is easily traceable to the peculiarities of the system of medical education which has prevailed in this country since our existence as an independent nation. Theoretically, that system has its basis in a course of three years of quiet study in the office of a private preceptor, aided by a short annual review of the several branches in the medical

colleges. And if it was true, that every practitioner who receives students into his office, faithfully acted the part of a preceptor or teacher, by judiciously directing which branches should be studied first, and by daily systematic examinations and instructions of the student in those branches; and if the organization of the colleges was such that each student was required to confine his attention to the reviews and demonstrations in the branches corresponding with his period of advancement in study, there would be little fault to find with the system. For while it would make good students, on one hand, on the other it would contribute largely to keep up the habits of reading and close observation by the practitioner acting as preceptor.

Practically, however, it has long since become the custom for students to enroll their names in the office of some practitioner, and spend the period of private pupilage in the desultory reading of medical books, without an hour of instruction from their so-called preceptors once a month; while the colleges are so organized that no classification of the pupils is allowed, the new beginner and the advanced student being mixed in the same lecture-room, and subjected alike to the hearing of a didactic review of all the branches of medicine, heterogeneously, within the period of sixteen or eighteen weeks. The young man, who thirty or sixty days since left the plough, the workshop, or the schoolroom, and who does not yet know enough of the elements of medical science to tell the number of bones in his own cranium, and the student of two and three years, are placed side by side, and made to listen daily, at alternate hours, to lectures on the elements of anatomy and practical medicine, physiology and the details of practical surgery, chemistry, and obstetrics, etc., at such a rate that in the short period of four or five months they have had poured into their ears instruction in anatomy, physiology, chemistry (organic and inorganic), materia medica, histology, microscopy, general pathology, pathological anatomy, hygiene, medical jurisprudence, practical medicine, surgery, obstetrics, and clinical observations at the bedside.

When we remember that the careful reading of a creditable text-book on any three of these branches of medical science would occupy a good student more than the eighteen weeks allotted by most of the colleges for an entire lecture term, we shall realize how absurd the present system appears in actual practice. Indeed, it is doubtful whether human ingenuity could devise, by the most careful deliberation, a scheme of professional education better calculated to prevent the acquisition of extensive knowledge, thoroughness of mental discipline, or quickness and accuracy of observation; or one more directly favorable to superficial and imperfect acquirements, hasty and illogical reasoning, and the abrogation of all distinction between the elementary and the practical—the foundation and the superstructure.

So glaring were the defects in our system of medical education, and so prominent the evils resulting, both to the profession and the community, that more than thirty years since, it began to be most severely criticised by such men as Nathaniel Chapman, Daniel Drake, Samuel Jackson, Alexander H. Stevens, and many others of high standing in the profession. From 1835 to 1846, the subject not only engaged the attention of many of the most eminent men connected with the medical colleges, but elicited earnest discussion in most of the State Medical Societies then existing. These discussions resulted in the assembling of the first National Medical Convention, held in the city of New York, in May, 1846; and from which originated the American Medical Association. Since the organization of that Association, not an annual session has passed during which there was not a general admission on the part of its members from every part of the country, that our system of medical college instruction is most lamentably defective. And even in the Convention of delegates from medical colleges alone, held in Cincinnati, May, 1867, not a single member was found willing to attempt a defence of the present system.

Yet such has been the force of self-interest, and such the overpowering influence of the desire on the part of each college to swell the size of its classes and the number of its alumni,

coupled with a want of confidence in the faithful coöperation of competing colleges, that no essential changes in the system have been effected. It is true that new branches have been added to the college curriculum; a few additional professorships have been created; from two to four weeks have been added to the annual lecture terms in most of the colleges; and additional clinical facilities have been provided in many places; but the same ignoring of preliminary education; the same neglect of all classification of students or successive order of teaching; and the same repetitional, heterogeneous, intermingling of instruction on all branches of medical science and art, to all grades of students in one class, in the short space of four or five months, still exists in all but one or two of the medical colleges in our country.

Within the last few years the faculties of many of the colleges, in different parts of the country, have officially signified their readiness to adopt such specified changes as would remedy all the important defects of the present system, provided such changes can be adopted simultaneously by all, or a large majority, of the colleges in all parts of the country. But the faculties of many others remain silent, while the organs representing a few, let no opportunity pass unimproved, to ridicule whoever earnestly advocates improvements demanded alike by the interests of humanity and the honor of our noble calling. They are careful never to attempt a defence of the present defective system of education, or manfully to criticise proposed plans for improvement. But they are ever ready to sneeringly apply the epithet "*Pseudo-Reformers*," and to talk facetiously of "*Apostles of Reform*," and "*Phantoms in Black*." This small class of small men always remind us of one of the finny tribes, which, incapable of any other defence, when attacked expels from its ink-bag a mass of black fluid by which the water is rendered so turbid that its own body is hidden from the view of its assailant.

I need not remind you, gentlemen, that the members of the Faculty of this College are among the most earnest advocates of such changes in the general system of medical college in-

struction, as are almost universally admitted to be necessary, for they have demonstrated this in the organization of the College itself.

So early as 1857, while three of the present Faculty of this College held prominent chairs in the Faculty of the Rush Medical College of this city, chiefly through the active advocacy of Professor Byford and myself, a plan was devised for extending the annual college term of that institution to six or eight months, classifying the students, and arranging the order of teaching into junior and senior departments, which received the sanction of a large majority of the, then existing, faculty, and was finally prevented from practical adoption solely by the opposition of the late Professor Brainard, who was President of the College. Two years later, namely, in the spring of 1859, a very favorable opportunity occurred for the establishment of a new medical college in this city, under the auspices of the Board of Trustees of what was then called "Lind University." Professor H. A. Johnson, who had previously resigned his position in the Rush Medical College, and Professor E. Andrews, acting more or less in concert with Professor R. N. Isham and the late Dr. David Rutter, ascertaining that the said Board of Trustees were desirous of establishing a Medical Department of their University, and were willing to sanction such an organization as the interests of the profession and the community required, without regard to effete customs or the mere number of students, entered into a contract with the Board, by which they were authorized to nominate a Faculty, and adopt such plan of organization as the faculty so nominated might deem proper.

Having thus taken the initiatory steps for the organization of a new medical school, Professor Johnson, in behalf of the parties just named, communicated the fact to my colleague in the chair of Obstetrics, and to myself, together with an invitation for us to join them, and aid in the completion of the organization. Having fully satisfied ourselves that no important changes could be effected in the plan of instruction in the Rush Medical College, and regarding such changes as of far more

importance to the profession than any mere personal interests of our own, we cheerfully resigned our places and entered upon the new work. A plan of organization for the new school was speedily matured, embracing thirteen professorships; the principle of progressive study and teaching, by dividing the various branches into junior and senior groups or departments, and classifying the students accordingly; the requirement of annual examinations; the adoption of hospital clinical instruction as an essential part of the course; and the extension of the lecture term.

To demonstrate to all the profession, that those engaging in the organization of the new college were not actuated by any petty personal rivalry, or desire to establish a new school merely to compete with those previously existing for numbers of students, regardless of the great principles of education, the lecture term adopted was five calendar months, and the annual lecture fees fifty dollars cash and no credit, while at that time the Rush Medical College, in our own city, had a lecture term of only *sixteen weeks*, and an annual lecture fee of only thirty-five dollars, and our next nearest neighbor, the Medical Department of the University of Michigan, charged only an initiatory fee of ten dollars.

Having completed the plan of organization and nominated competent men to fill the several chairs, the same received the sanction of the Trustees of the University. Rooms for temporary occupancy were fitted up in what was called Lind's Block, on Market Street, and on the first Monday in October, 1859, the first course of lectures in this institution was commenced, with a class of about thirty students. With the Mercy Hospital as an ample field for daily clinical instruction, the entire course was completed with regularity and great satisfaction. At the first public commencement, on the first Monday in March, 1860, the degree of M.D. was conferred on nine regular students.

Three years subsequently, the ground was purchased, and the building in which we are now assembled was erected, and dedicated as a temple for the advancement of medical science and art.

About the same time, Mr. Sylvester Lind, after whom the University had been named, having failed, from pecuniary reverses, to endow the Theological Department, as he had originally agreed to do, the Board of Trustees procured a change of name to that of Lake Forest University. This change in the name, together with the failure of the Board to furnish the money for the new college building in accordance with the original agreement, led to the organization of a new Board of Trustees under the laws of the State in which the title to the Medical College property was vested, and the new corporation took the name of the Chicago Medical College.

From the first year of our organization to the present time, the prosperity of the College has been remarkably uniform and satisfactory. Commencing with thirty-three students and twelve graduates (including three *ad eundems*) the first year, we closed our last and ninth course with 113 students and fifty graduates (including two *ad eundem* and three honorary degrees).

In pecuniary matters our condition is equally satisfactory. Instead of a load of indebtedness taxing the pockets of every member of the Faculty annually to pay the interest; or a joint-stock concern, in which every chair is encumbered with one or more shares of the stock, the Trustees are the absolute owners of the College building and grounds, and completely secured from all encumbrances. In addition, we have accumulated an admirable museum for illustration of the various branches; a library of several hundred volumes; and a complete laboratory for instruction in elementary, organic, and practical chemistry.

Having, in the short period of nine years, secured all these results, and fully demonstrated the success and permanency of our College, the Trustees and Faculty have unanimously agreed to extend our annual lecture term to six months; to complete the classification of studies and students, by making three departments corresponding with the three years of study; to require three annual courses of lectures before graduating, with a thorough examination at the close of each; and to exact at least a moderate standard of preliminary education at the entrance.

At the same time, they have increased the facilities for clinical instruction, added a separate chair on Public Hygiene, provided special courses on Ophthalmology, Orthopædic appliances, physical and instrumental diagnosis, and Comparative Anatomy; with the most perfect arrangements for detailed instruction in practical and analytical chemistry. And at the opening of this, the tenth annual course of instruction, it is with unfeigned pleasure and gratitude that I welcome you, gentlemen, to the halls of the first American Medical College whose organization is in accordance with those principles of edcation everywhere acknowledged to be correct; whose system of instruction, both in regard to length of term and systematic order of studies, is commensurate with the field of medical science and the demands of the profession; and whose material appliances are complete in every part. I acknowledge a feeling of pride that I am identified with an institution whose Trustees and Faculty have risen so far above the mere considerations of pecuniary gain and petty competition for numbers of students, as to demonstrate to the whole profession of our country the practicability of establishing and maintaining medical colleges on a basis commensurate with the wants, the interests, and the honor of the profession.

And I am sure there is not one of you, who coöperate with us by submitting as students to a patient, systematic, and thorough course of professional study, who will not, in after years, feel an equal, nay! a greater pride in your Alma Mater.

Her successful example must and will be followed, sooner or later, by other colleges in every part of the country. Many of those now existing may cling to their idols, namely, jealousy of each other and an overweening desire for large classes, regardless of quality; but if so, they will some day wake up to find themselves supplanted by new ones on a more rational basis. The change may be slow. Indeed, all great improvements in human institutions are of slow growth.

The revolution may destroy the work of centuries in a day; but, like the whirlwind, it leaves only wrecks and debris in its path, which often require generations to remove and replace with improved organizations.

But, fellow-students, having indulged in this brief glance at the past history of the Chicago Medical College, and welcomed you to its halls, I must not close without a few words to you regarding the duties and responsibilities devolving upon every student of medicine. If there are any established truths in the various departments of medical science; if there is any real efficacy in the action of medicines on the human system; if their intelligent administration is capable of mitigating human suffering and prolonging human life; if the surgical art, skilfully applied, is capable of rectifying deformities, removing obstructions and tumors, staying the flow of blood, and healing wounds; in few words, if the medical profession is a necessary part of every civilized society, its members the conservators of public health and the welcome guests at every bedside of the sick, then is there a responsibility resting upon every student which he cannot appreciate too early or too clearly.

You are preparing to enter upon the practice of a profession where every step you take is in relation to the two most sacred interests of your fellow-men—namely, life and health. On the extent and accuracy of your knowledge, the quickness of your perceptions, the coolness of your judgment, and the skill of your manipulations, may depend the life of the first mother or child with whom you have to do. Medical science is constituted of such facts, principles, and materials from all other sciences, as relate to the human system, in all its varying conditions of health and disease. Medical art the application of this vast aggregation of facts, principles, and appliances, to the prevention and treatment of all the diseases, accidents, and imperfections to which the human family are liable.

The field open for cultivation by the medical student is exceedingly broad; the three years' time allotted for improvement is comparatively short; and he who expects to reap a harvest of either usefulness or honor, will find no time to loiter by the way. He cannot afford to lull his senses with the fumes of tobacco, or poison his blood and pervert his passions with alcohol. He cannot recline on the alluring sofa of sensual pleasures, nor waste time in the lecture-room listening to the facetious an-

ecdotes or vulgar stories of his pretended teachers. His work is an earnest and responsible one. And all the more so, because a large majority of those with whom he has to do, are incapable of judging whether he does them justice or not. At every step, he requires accuracy of knowledge, quickness of perception, purity of thought, correctness of deduction, and promptness of action.

My hearers, these are qualities that are neither born with us, nor furnished ready made by any institution; nor can they be purchased with any quantity of money or good wishes. They are, however, within the reach of all of you. Patient, persevering, systematic study, animated by the noble aspiration to be useful in your day and generation, and associated with a daily life of unbending virtue, will develop every one of them in their fulness. It should be the aim of every student of medicine to so qualify himself, both in the acquisition of knowledge and in the development and discipline of his mental faculties, that he can give to every patient committed to his charge, all the benefit that the science and art of medicine is capable of affording.

Gentlemen, if you will treasure up, and faithfully act, through life, on these brief and hastily-expressed hints, you may not all gather an abundance of that wealth which is measured either by gold or *greenbacks*, but you will surely gather what is far better, a consciousness of having made the world better and happier for your having lived in it, and a conscience void of offence towards God and man.

CHLORIDE OF AMMONIUM AND TINCTURE OF ACONITE IN OVARIAN NEURALGIA.—Dr. J. Waring-Curran states that this combination seems to have a magical influence in the treatment of ovarian neuralgia. He reports six cases in which various sedatives and anodynes had been tried in vain. He prescribed an eight-ounce mixture, containing two drachms of muriate of ammonia, with five-drop doses of tincture of aconite, and found that before the mixture was finished by the patient the pains had entirely ceased.—*Medical Press and Circular*, August 19, 1868.

ARTICLE XLV.

NITRATE OF SILVER IN THE TREATMENT OF UTERINE POLYPI.

By M. M. EATON, M.D., Peoria, Ill., Membre Adhérent du Congress Médical International de Paris.

Mrs. D., aged 46 years, living 25 miles in the country, consulted me in June, 1866, regarding a uterine hemorrhage, which had annoyed her for over two years, almost constantly.

Upon examination, I found her of a nervous temperament, anæmic, emaciated. By digital examination, I found two polypi, of the size of a filbert, external to the uterus, and attached by a long pedicle to the margin of the os uteri. I explained the case to my patient, and recommended their removal by torsion. She consented, but desired that I should come to her home to remove them, and promised to write in about two weeks what day I should come. I gave her a tonic of bark and iron, and heard no more of the case for about a year, when she again consulted me, June 25th, 1867. She stated, that soon after her visit to me last year, she had discharged the two small tumors per vaginam, and that she had been much improved in general health, and that the hemorrhage had ceased for two or three months, and she had not sent for me for these reasons; but that now she was troubled with the hemorrhage as badly as ever, and had been for eight or nine months; and, as she was getting worse, she desired something should be done. I requested her husband to place her in a boarding-house, and let her remain a while in the city, which he did. She was much exhausted with her ride in the car, and I delayed a vaginal examination till the next day.

June 26th.—On making a digital examination, I could detect no tumors, and nothing abnormal, except an enlargement of the womb, and considerable hemorrhage, mixed with pus of an unhealthy character. On attempting to examine the uterus with a uterine sound, there was such an alarming hemorrhage

as to cause me to desist before ascertaining anything, except that the canal seemed to be obstructed. I immediately introduced a sponge-tent, to serve as a tampon and dilate the neck of the uterus (which, I should have stated, was nearly closed). This arrested the hemorrhage, but caused much pain. I gave anodynes, and introduced a larger tent, and so on, for four days, when, on passing my finger into the neck of the womb, I detected the whole surface thickly studded with polypi, from the size of a grain of wheat to that of a kernel of corn, and three or four about the size of a hickory-nut, situated high up.

The hemorrhage was free from the examination, and I concluded I would apply the solid nitrate of silver, and again introduce the sponge-tent, which acted well as a tampon. I accordingly did so, cauterizing all the tumors freely, through a duck-billed speculum, endeavoring to touch the pedicles of all I could.

The next day removed the sponge, and several small polypi (glandular variety) were discharged. I again applied the silver, and left the womb open. On the fourth day of the use of the caustic the hemorrhage had almost ceased, and I found that the tumors in the neck had all been detached and discharged, but there was considerable discharge of offensive matter. I syringed the uterus with tepid water, in which there was a small amount of liq. chlo. sodæ, and applied the silver to those suppurating spots where the pedicles had been attached, which, by the way, constituted nearly the whole internal surface of the neck; keeping her under the influence of anodynes most of the time, and giving tonics, with beef-tea and soup.

Continued this treatment ten days, when she commenced to flow immoderately, and I made another digital examination, and found two tumors in the cavity of the womb, apparently about the size of an orange. I now gave a decoction of ergot, which caused uterine contractions and some slight descent of the tumors. My patient's strength giving way, I feared to delay matters, and applied caustic to the tumors as freely as possible. This, with the ergot, arrested most of the hemorrhage, and I contented myself with giving tonics, anodynes, and nourish-

ment, and applying the silver every two or three days, for nearly two weeks, when, considerable pain coming on, I made an examination, and found I could brake them down with my finger; which I did, using forceps two or three times, to assist, when I was enabled to get the tumors entirely away, leaving the uterus entirely empty, but considerably enlarged.

I again cauterized the seat of the attachment of the pedicles, which were about ½ inch in diameter, and gave decoction of ergot. The uterus contracted kindly, and patient expressed herself as feeling greatly relieved. August 10th, three days after, found the uterus contracted, but considerable discharge of tolerably healthy pus. Gave the phos. elix. bark and iron, in ʒ doses, four times a day, and recommended bathing with tepid water and open-air exercise in a carriage for a short distance each day.

September 3d.—Case has progressed favorably: no hemorrhage or matter for several days; health improving; appetite good. Allowed her to return home.

July 9th, 1868.—Saw Mrs. D. Is now doing her own work; has had no hemorrhage; matter ceased, excepting a leucorrhœal discharge sometimes. Made an examination, to satisfy myself of the condition of affairs, and found everything normal except a slight prolapse of the uterus. Recommended the wearing of an abdominal supporter, which will probably rectify the slight misplacement. So far as the tumors are concerned, she must be considered cured; and she says her general health is as good as she could expect, as she has always been weakly. She has gained very much in flesh since last year, and has quite good color.

I made a note of this case from the comparative simplicity of the treatment, it not requiring many instruments or much skill, hoping that physicians in small places will take hold of these cases resolutely, instead of giving a palliating and a dubious prognosis, many times making no examination of the uterus, but simply taking a patient's word for the state of affairs. I might occupy pages in telling amusing anecdotes of the mistakes ladies have made respecting their own cases, which have

occurred in my limited experience, but this is foreign to my subject.

My principal reason for employing the nitrate of silver was to prevent hemorrhage, which I feared would prove fatal if I used torsion, as I have usually done in small polypi (I have successfully operated on two cases the last month, using torsion for removing a single polypus in each case), and also the favorable result in a case I reported on page 1 of this volume, in the destruction of a large watery tumor or hydatid, which had caused retroversion and inability to use one leg for two years.

Besides, Dr. Montgomery, in his paper published of "Uterine Tumors," says "small polypi may be conveniently destroyed by caustic."

Prof. Byford also states, on page 370 of his work on "Diseases of Women," that "Dr. Simpson, of Edinburgh, has at least in one instance effected the destruction of a uterine tumor by cauterizing its interior with potassa fusa."

I simply give this little experience with "argentum nitratis," thinking it to be more convenient and less dangerous than potassa fusa, and perhaps, in cases like the one just named, more applicable than either torsion or excision; or removal by ligature or the écrasseur; or even by the new method of Prof. Byford, of Chicago, "by introducing a dossil of cotton or lint through a canula into the substance of the tumor; the cotton to remain and produce suppurative action, and be removed by means of a thread tied to it before its introduction." His method, however, may be useful in some cases, especially where the tumor is solitary.

THE PHILADELPHIA MEDICAL REGISTER AND DIRECTORY.—We take pleasure in announcing the appearance of this useful little volume, edited by Dr. John H. Packard, and which has been recently issued by Collins, Printer, 705 Jayne Street. It furnishes much useful information regarding the various Medical Associations, Medical Schools, and kindred Institutions; Hospitals, Dispensaries, Charitable Institutions, and other matters, and a Directory of the Physicians of Philadelphia, with their office hours.—*Medical News and Library*, October, 1868.

ARTICLE XLVI.

THE OXYGEN MIXTURE, A NEW ANÆSTHETIC COMBINATION.

By E. ANDREWS, M.D., Prof. of Principles and Practice of Surgery, Chicago Medical College.

Every surgeon who has seen the prompt and pleasant anæsthetic action of the nitrous oxide gas, so much used by dentists, has wished that in some way it might be made available in general surgery. The patient usually goes under the influence in 30 or 40 seconds, and wakes with equal promptness, without vomiting or other unpleasant symptoms, all of which is in striking contrast with the slowness, the nausea, and the discomforts of chloroform and ether. There have been, however, great obstacles to the use of the gas, owing to its evanescent action. The oxygen contained in it is in a state of chemical combination, so that it is not available for oxygenation of the blood; hence if any attempt is made to continue its action, the patient becomes purple in the face, showing all the signs of asphyxia; subsultus tendinum then supervenes, and shortly after he almost ceases to breathe, and, if allowed nothing but pure nitrous oxide, would doubtless die in a few minutes.

I have for some time been experimenting, to see whether by the addition of free oxygen to the nitrous oxide, a mixture would not be obtained, by which a patient might be anæsthetized for an indefinite period without danger of asphyxia, and thus render gas available for the most prolonged operations of surgery. These experiments are not yet finished, but they have advanced far enough to show that the preparation, which I have named the Oxygen Mixture, is certainly available for a large part of our operations, and that for pleasantness, and probable safety, it is infinitely superior to chloroform, ether, or unmixed nitrous oxide. The following facts and experiments show the present state of our knowledge on the subject:—

In the first place, pure nitrous oxide, when given for brief operations, appears to be the safest anæsthetic known. Chlo-

roform, in American and European hospitals, kills one out of about every 3600 patients who take it; but the Colton Dental Association, a company with branches in all our principal cities, established for the sole purpose of extracting teeth, has on its books over sixty thousand cases of anæsthesia by nitrous oxide, without a single death caused by the anæsthetic.

Now, it cannot be supposed that the addition of a moderate amount of free oxygen, in mechanical mixture, to nitrous oxide can produce any new danger; on the contrary, by removing all possibility of asphyxia, it must be eminently an element of safety.

To test this question, the following experiments were performed:—

EXP. 1. A large rat was placed in a glass jar on a perforated floor, beneath which was a stratum of lime-water to absorb the carbonic acid produced by its breathing. To make more sure of this result, a jet of lime-water spray was thrown into the jar at frequent intervals during the experiment. I then turned on a small stream of pure nitrous oxide gas, which, being fifty per cent. heavier than atmospheric air, settled to the bottom, and expelled the atmospheric air by displacement. In two minutes the animal fell over upon its side, breathing slowly with deep-labored inspirations. The respirations continued to become slower, until, at the end of ten minutes, they ceased entirely, and life was found to be extinct. The death was doubtless from asphyxia.

EXP. 2. Another rat was placed in the jar under the same conditions, and exposed to an oxygen mixture consisting of about one-fourth of free oxygen to three-fourths of nitrous oxide. In two and a half minutes he was so completely anæsthetized that he could not be made to respond to pinching or pushing. There was no panting, or laboring for breath, as when pure nitrous oxide was used, but the respiration was rather slow, and very gentle. He was kept in the mixture half an hour, and then removed, still perfectly anæsthetized. In five minutes he began efforts at walking, and in ten seemed to be perfectly restored to his natural condition.

Exp. 3. A rat was placed in the jar and given the oxygen mixture, containing 25 per cent. pure oxygen. This being more than is contained in the atmosphere, diluted the nitrous oxide too much, which, together with the fact that the animal was less susceptible than the former, prevented full anæsthesia. He fell into a sort of intoxicated condition, without appearing to be fully unconscious, and continued thus throughout the experiment. At the end of 30 minutes the gas was shut off, and the animal shortly recovered his sobriety.

Exp. 4. The same animal was again exposed to the oxygen mixture for half an hour, with precisely the same results as before.

Exp. 5. To test the relative safety of the oxygen mixture as compared with ether, my friend Dr. Sherman took the same rat, after his recovery from experiment No. 4, and dropped into the jar a little sulphuric ether. In a short time he was unconscious, and in two minutes was dead.

Exp. 6. A lady had an anchylosed knee, to which I wished to restore motion by forcible flexion. Having a dread of ether and chloroform, she inhaled the oxygen mixture in the proportion of one-third free oxygen to two-thirds nitrous oxide. In forty seconds she was perfectly anæsthetized, without any blueness of the countenance, or laboring for breath. There was a little pallor about the lips. I broke up the adhesions of the joint by flexing and extending it forcibly. She probably inhaled the gas about two minutes, felt no pain, and awaked without nausea.

Exp. 7. A young woman took in my presence the mixture as prepared by Dr. Rogers, dentist, for the extraction of a tooth. There was, as before, a slight pallor of the prolabia, but no asphyxiated purpling of the face. The tooth was extracted without pain, and the patient awoke without nausea.

Exp. 8. A woman, aged 42, had anchylosis of the right hip, with contraction of the flexors of both knees, fixing those joints at a right angle. I desired to cut all the hamstring tendons of both limbs, and to break up by force the adhesions of the anchylosed hip. The gas was given from a 30-gallon elastic bag,

with an imperfect inhaler. The mixture contained one-third free oxygen. Owing to the imperfection of the inhaler, it was found impossible to prevent the patient getting considerable atmospheric air with the gas, so that the anæsthesia was less perfect, and slower than in the former instance. After inhaling it for nine minutes, she became unconscious, and I severed all the hamstrings. I then endeavored to break the adhesions of the head of the femur, but found they were too firm, and I desisted. The operations lasted about three minutes, when she was allowed to recover, which she did without nausea, though she had a meal in the stomach. Twice during the inhalation there was a sort of pallor of the face, with very faint duskiness, which induced me to suspend the administration of the gas a few respirations.

EXP. 9. Mrs. R. had ingrowing, painful nails on both feet. Ten months ago she took ether for the extraction of one of them. She was of a very nervous temperament, was slow in coming under the influence of the ether, and after partially awaking remained delirious, and distressed a considerable time. Three months afterwards she took pure nitrous oxide for the extraction of a tooth. She was anæsthetized in about one minute, and felt no pain, but the countenance was blue with asphyxia, and she was delirious a good while after waking. She felt uncomfortable for several days. Six months afterwards she was again anæsthetized by Dr. Reber, a dentist, who had prepared the oxygen mixture at the suggestion of Dr. Sherman. The gas contained one-third free oxygen. She was anæsthetized in one and three-quarter minutes, and in that condition Dr. Sherman split the offending toe-nail and tore out the proper half of it without causing any pain. She inhaled the gas for three minutes in all. On awaking, she was as usual delirious, which state, however, continued only fifteen minutes, a much shorter time than after ether or pure nitrous oxide. There was no blueness nor pallor of the lips during inhalation, and on her waking she was much more comfortable than after anæsthesia with the other articles.

Dr. Reber has given the oxygen mixture to several patients

for the extraction of teeth, and states that it uniformly acts more agreeably than unmixed nitrous oxide.

Dr. Rogers, a dentist of this city, states that he has used a mixture containing one-third free oxygen for several years, and that in his opinion it is far pleasanter than unmixed nitrous oxide.

Some months ago some such mixture was proposed in England, but was overthrown, I think, by the influence of Dr. Richardson, who argued, on theoretical grounds merely, that it would not be successful, nor safe. I cannot learn that it was ever actually tried in Europe.

Prof. Watt, of the Dental College in Cincinnati, has been experimenting, I understand, on what involves partly the same principle. I am informed that he gives alternately inspirations of nitrous oxide and atmospheric air, and thus both avoids the asphyxia, and is able to continue the inhalation a long time. I have written to him inquiring about his results, but have received no answer.

The above experiments are by no means sufficient to settle the value of the oxygen mixture, but they give strong reason to think that it will prove the safest, and by far the pleasantest, anæsthetic known. As to its safety, it is highly significant, that a rat which had been twice immersed in the mixture for half an hour without injury, was killed in two minutes by ether; and yet ether is far safer than chloroform.

It is my impression that the best proportion of oxygen will be found to be one-fifth by volume, which is the same as in the atmospheric air. There are some points requiring care in the management, in order to insure success. As the oxygen dilutes the nitrous oxide, it is necessary to be very careful to exclude all atmospheric air, or else the anæsthesia will be imperfect. The inhaler must be taken into the mouth, the lips very carefully closed around it, and the nares compressed by the person administering the anæsthetic. For the same reason, great care should be taken to secure purity of the gases, otherwise the mixture will be too weak to control some patients. I have found, by introducing phosphorus into a bell glass of what was

supposed to be very pure nitrous oxide, that it contained considerable free oxygen, which doubtless was from included atmospheric air; and therefore four times the bulk of free, inert nitrogen must have been present also, to weaken the power of the article.

The oxygen is best prepared by taking pure chlorate of potash mixed with a little black oxide of manganese, and placing them in a copper retort and applying heat. The gas should pass through four washing-bottles, just as the nitrous oxide does. The same bottles will answer. As the nitrous oxide is fifty per cent. heavier than oxygen, it is better to pass it into the gasometer first. The oxygen coming afterwards, passes up through it, and hastens the mixing. It is better to let them stand a day or two, if possible, before using, to complete the mixture, but this is not essential.

Dr. Evans, the well-known American dentist in Paris, asserts that the ordinary nitrous oxide is very far from pure, even when well made. He states that he has been in the habit of purifying his gas by mechanically condensing it to a liquid under high pressure. This liquid, being absolutely pure nitrous oxide, is then allowed to reassume the gaseous form in a bag, or a gasometer. He finds that gas thus purified, only requires about half the usual quantity to anæsthetize a patient.

It seems probable, therefore, that the oxygen mixture will enable us to anæsthetize a patient for the longest as well as for the shortest surgical operations, and that it is safer and pleasanter than any anæsthetic known. There are, however, some inconveniences about it, on account of its great bulk. For office use, and also in hospitals, this is no objection, as it can be kept in a gasometer; but for outside patients it can only be carried in a large rubber bag. In city practice, among the higher classes, however, this is no obstacle, as the bag can always be taken in a carriage, without attracting observation.

I shall continue my experiments, and report the results at a future time.

ARTICLE XLVII.

CASE OF CONVULSIONS FROM ORGANIC DISEASE OF THE BRAIN.

By S. T. ODELL, M.D., St. Louis, Kansas.

Although the following case, which occurred in my practice at Atwood, Ind., loses much of the interest which it would otherwise possess from the fact that it passed from under observation prior to its termination, yet it is reported, with the belief that it will be of some slight value as a contribution to the literature of organic disease of the brain.

December 29th, 1867, I was called to see Jerry L., aged 35, farm laborer, unmarried. Weight about 160 pounds; muscular system well developed. I obtained from friends present the following history of his case up to the time I was called:—

He was struck in right eye by a snow-ball in the winter of 1860, and was confined to his bed two days in consequence. Those now with him were not present at that time, and are unable to state the character of his sickness then, and he cannot himself remember anything more about it than that he was struck, and afterwards *awaked* with a very much swollen eye, and that after the swelling subsided he had lost the use of his right eye.

From the date of his getting up from this injury he was able, as before, to attend to all his duties as general farm laborer, and was in the enjoyment of robust health up to December 1st, 1867. On this day, while engaged in the light work of feeding cattle in the farm-yard, he suddenly became conscious of the fact that his sight was failing him, and although he made all possible haste to the house, so rapidly did loss of sight supervene, that it was with difficulty that he discovered his way. On reaching the house he laid down, and in less than two hours from the time of his leaving the farm-yard his left, and hitherto useful, eye was as useless for sight as had been the other for years.

Simultaneously with this loss of vision came on a severe

shaking fit, resembling somewhat the rigors of intermittent fever. He felt, however, no chilliness during the course of the convulsive movements. After several minutes this shaking subsided, leaving him with a heavy headache for about two hours, when, to use his own expression, he "felt all right—good as ever—only couldn't see." At intervals ranging from one to twenty-four hours he had returns of these convulsive movements, each recurring paroxysm being more severe and protracted. At times they affected most the muscles of one side of the body, at other times the opposite side, and again they would severely shake the entire body. The statement that these convulsions at times affected but one side of the body is made on the strength of the positive and repeated assertions of his friends, for at no time during my personal observation of the case did it occur.

At 3 o'clock P.M., December 29th, he was attacked with convulsions more violently than usual, and, as they continued with but momentary respite until he seemed nearly worn out, at dark I was sent for, and arrived about 8 o'clock P.M. When I arrived the patient was lying on a bed and shaking so violently as to agitate the bedstead, and even occasionally to jar the entire house.

The attacks varied from ten seconds to two minutes in duration, with an interval between them of from thirty to sixty seconds. Patient perfectly conscious both during the convulsions and intervals. Pulse, as counted in the interval, 70 per minute. Tongue clean, of normal appearance, and protruded without hesitation or difficulty. Taste normal. Hearing perfect in the left ear, but in the right much impaired; on inquiry, it was ascertained that this fact had not been noticed prior to this evening. I regret that want of appliances, as well as a want of skill in their use, to which I must confess, prevented my making an ophthalmoscopic examination of the eyes at this, or any other time during the progress of the case. The right eye, which was injured by the snow-ball seven years ago, was normal in external appearance; pupil, however, contracted to the size of an ordinary pin-head. The pupil of the left eye was

widely dilated, and would not respond to the light. Patient stated that he could distinguish daylight from darkness with this eye; this may be doubted, as he was unable to tell any difference in the light of the room when the lamp was held immediately before his eyes and when it was withdrawn from the room.

Appetite but little impaired during the entire time that he was under observation; his bowels were constipated. He stated that his "spells," as he termed them, were invariably preceded, accompanied, and followed by a heavy, dull aching in the back part of his head, his neck and back; and that the "shaking" seemed to commence in the back part of his head, and extend thence all over him; when, in fact, the invasion of a paroxysm was marked to the bystander by a twitching of the muscles of the extremities, which was speedily followed by the motions immediately described.

At the commencement of each attack the forearms were semiflexed upon the arms, the hands semiflexed upon the forearms, thighs slightly bent upon abdomen, and the legs upon the thighs. These relative positions of the members were not changed by the convulsions. The trunk was only slightly bent forward, and at no time was there either opisthotonos or lateral contortion of the body. During a convulsion the flexors and extensors seemed so evenly balanced in the amount of motor influence alternately received, that neither the hands or feet would move more than six inches under the influence of one set of muscles, until they were violently jerked in the other direction by the opposing set; while the motion of the lower portion of the trunk backward and forward was, although limited in extent of space, almost inconceivably rapid. The muscles of the face were affected but slightly, if at all, and respiration was not interfered with to any notable degree.

I am thus particular in describing these convulsions because they were unlike anything I had heretofore seen.

In intellect the patient was always somewhat obtuse, without, however, being an imbecile. On inquiry, I learned that since his attack on December 1st, the patient had been for a short time under the treatment of Dr. Gray, of Palestine, Ind., who

had assaulted the malady with the whole battery of antispasmodics, and without making an impression, and afterwards of a quack "Indian Doctor" of Warsaw, Ind., the nature of whose medication in the case I was unable to learn; its result, however, was, to say the least, not beneficial.

As I deemed it difficult, if not impossible, to arrive unaided at a satisfactory diagnosis upon which to base treatment, I suggested the propriety of sending for counsel; to this the friends of the patient would not accede, alleging that they had already had in employ one regular physician, and "The Indian Doctor," to no avail, and that they were not disposed to go to any further expense in the treatment of a case apparently so hopeless. At this point my interest in observing the course of the disease alone prevented my immediate withdrawal from any further connection with the case.

As the idea of chronic inflammation along the base of the brain seemed the most plausible in accounting for the symptoms present, I applied a blister at the nape of the neck, and gave a sharp purgative, promising to return next morning and continue treatment. The patient complained of pain in the limbs and back, and as I was perhaps unduly cautious as to the use of opium in his case (as I was uncertain as to the correctness of my diagnosis), I left a few doses of ext. hyoscyamus, to be taken at intervals through the night.

January 30th.—Received word that Jerry was better, and that I need not visit him. Discharged because I had not held out hopes of a cure.

December 13th, 1868.—As I was passing on my way to another patient, I stopped to see Jerry. He has received no treatment since my visit. Convulsions still recurring every few hours, or more often, and he is manifestly losing flesh and strength. Appetite good. Pulse *40 per minute.* Both pupils moderately dilated.

March 17th.—Jerry no better, his longest respite from convulsions being twelve to eighteen hours. Pulse 45 per minute. In addition to convulsions, now complains of occasional dyspnœa; says he "can hardly get his breath sometimes for half

an hour at a time." Has had no treatment of any kind since December 29th.

July 8th.—Saw Jerry at work washing clothes, still blind, still suffering from occasional difficulty of breathing, and still shaking every few hours. Pulse 60 per minute, and general health much improved.

Shortly after this date I removed to my present location, and lost sight of the case. Since its occurrence I have read with especial interest all the reported cases of tumor of the brain upon which I could lay my hands, yet I find in none of them an analogous case. If chronic inflammation along the base of the brain caused the symptoms observed, the next query would relate to the cause of the inflammation: The blow from the snow-ball seven years ago? I know of nothing else in the history of the case that could stand in a causative relation to such a supposed condition.

Of the cranial nerves, only the 2d and auditory division of the 7th (on the right side) were, as per evidence of the symptoms, affected; unless, indeed, the occasional attacks of dyspnœa complained of be referable to perverted action of the pneumogastric.

But for the evidence of organic disease furnished by these nerves, I should have felt no hesitancy in pronouncing the affection a case of *Convulsive Tumor*, as described by Dr. W. A. Hammond (*New York Med. Jour.*, June, 1867—Ranking's *Hf.-Yearly Abs.*, Vol. XVI., p. 48, *et seq.*).

Abortion.—Dr. Fordyce Barker places great faith in chlorate of potash. This was first suggested by Sir James Y. Simpson, on the ground that its oxygen producing power would be beneficial in fatty placenta. Whatever might be the truth of this chemical theory, clinical experience has convinced Mr. Barker of the value of this remedy. Patients themselves notice its effect upon the movements of the fœtus. He relates several remarkable cases of success with this remedy after repeated abortions.—*Dominion Medical Journal.*

Proceedings of Societies.

MORGAN COUNTY MEDICAL SOCIETY.

The Society met in the Court House, Jacksonville, June 11th, at two o'clock P.M.

Upon being called to order by the President, Dr. David Prince, the proceedings of the last regular meeting were read and approved.

In the absence of the Secretary, Dr. C. J. Lucas was appointed Secretary *pro tem.*

The Treasurer of the last year, Dr. Craig, read his report, which was approved.

Dr. Robertson, of Tallula, exhibited a specimen of a tumor, taken from the cœcum and ascending colon, and gave the history of the case. The man, about 60 years of age, after a heavy lift in July last, felt an uneasiness in the bowels, which afterwards produced pain in that region. After a month, inflammation of the bowels set in, with formation of a tumor, which increased with the failure of his health. The tumor was hard and movable. Three weeks before his death he was troubled with diarrhœa in connection with a gurgling sound in the bowels after taking liquid, as is often heard in typhoid fever. One day before his death, May last, the tumor gave way, and convulsions followed. *Post mortem* examination showed an open tumor at the above-named place, with presence of pus in the bowels and opening of the tumor. The diagnosis was difficult during lifetime. The age and the slow progress of the disease could have given suspicion to cancerous disease, but no such diathesis in him or other members of the family could be traced.

Dr. Edgar, Sr., thought that formation of pus, if kept from the air, was not followed by early decline of health. Such tumors are common in women, in the region of the uterus and vagina, who are more subject to like injuries as in the above case,

producing abscess in parts distant from the place of injury, and obstructing, by pressure of the tumor, the functions of the adjacent organs.

Dr. Prince was of the opinion that mere presence of pus had no influence upon the decline of health, but the mechanical pressure and malposition of the bowels. He then related an interesting snake story, in which he was consulted.

Dr. Edgar, Sr., exhibited a cancerous tumor of the osteoid variety which he removed from the scrotum of a gentleman of this county. It was interesting chiefly on account of its being a different variety from any ever brought before and discussed by the Society. He also spoke of a case of hæmatoid cancer located in the throat, which he had under treatment last year. He held that cancer structure was specific and peculiar, both in form and mode of life.

Dr. Prince remarked, "It is thought that it is a blood disease. Why is syphilis not of the same nature? In the latter disease the commencement is local as a pimple on some part of the body, unless transmitted from mother to offspring. The first manifestation of cancer is a local tumor, and before it becomes large and branches out, it produces no local cachexia. Cancer, if cut out early, will produce no bad effects. Removals of cancer of the lips are generally successful, and they seldom return. The infiltration of the poison comes afterwards." He did not consider cancer a blood disease at its first appearance. An operation in Dr. Robertson's case, he thought, would only have accelerated the death of the patient.

Dr. Reed was of opinion that the cause of cancer is an imperfect development of the lymphatic system, and not a blood disease. Cancer and obscure tumors can often be kept back and cured by a proper tonic and narcotic treatment. He spoke of a case of cancer in which removal by the knife was urgently recommended, but the patient objected to it. He improved under treatment of iron and quinine. In another case of scirrhus, the disease was removed by tonic treatment. He died from old age, and from an attack of fever.

Dr. Edgar, Sr., doubted this theory, and thought that if

phthisis and syphilis were caused by derangement of the lymphatic system, and a child of syphilitic parents should not be nursed by the mother, the disease on the offspring would be caused by the poisoned blood, and not by the imperfect lymphatics.

Dr. Prince read a very interesting and able paper on convulsions, which caused a general discussion on this subject. He was requested by the Society to furnish a copy of it to some medical journal.

Dr. Bibb said that he was in the habit of using anæsthetics in convulsions, but lately, in four cases, tried the voltaic battery with good effect. He advises voltaic electricity in many cases of headache.

Dr. Lucas stated that in convulsions caused from irritation in the stomach, or from teething, mustard given for its emetic effect will be beneficial, producing vomiting only afterwards. If caused from irritation of the bowels, injections of warm water, to a great extent, even in infants one to two pints, will often relieve the disease as soon as the bowels are well washed out.

Questions arose in regard to the use of the voltaic battery in headache and other neuralgic diseases.

Dr. Craig said he used it with benefit in toothache.

Dr. Fisher relies more on nerve and blood tonics in neuralgia. He recommends, in protracted cases of cholera-infantum, an early nutritive and stimulating treatment, by which, he thinks, convulsions can often be kept back.

Dr. DeLeuw recommends, in convulsions of plethoric cases, the application of cold water to the head and spine; in anæmic cases, spirituous washings in connection with the internal use of valerianate of zinc, hyoscyamus, and musk. He reported also a case of poisoning by arsenic, treated by an emetic, albuminous drinks, and hydrated oxide of iron, resulting in recovery.

Drs. Reed and Robertson were appointed to read essays at the next meeting.

At five o'clock the Society adjourned.

C. J. LUCAS, M.D., Secretary *pro tem.*

The Clinique.

CLINICAL REPORT FROM MEDICAL WARDS OF MERCY HOSPITAL.

Service of N. S. DAVIS, M.D., Professor of Clinical Medicine, etc. Reported by W. A. Barstow.

PROBABLE SOFTENING OF THE BRAIN.

Gentlemen:—The case before you is one of interest, more especially in regard to its pathology and diagnosis. The patient is a native of Ireland, about 45 years of age, naturally muscular and strong; by occupation a laborer.

As you look at him in bed, you readily recognize a vacant, staring expression of countenance; a dorsal position, with limbs extended; not a tremulous, but an unsteady and backward movement of the hands; and in answer to my questions, you notice his speech is slow, hesitating, and frequently stops in the middle of a sentence, apparently losing the connection of thought. His mind often wanders, and his sleep is disturbed. He complains of no pain, and exhibits no sign of fever, not even increased heat in his head. The pupils are slightly dilated, and the vessels of the conjunctiva free from congestion.

He protrudes his tongue readily, giving it a narrow and pointed shape, and you see on its surface a thick, moist coat, particularly along its middle line. You find his skin soft, temperature natural, and sensibility good.

While lying in bed he can move all his limbs, and in any desired direction; and yet he can neither get up, nor stand erect, nor walk. He has only a partial control over the sphincters; both urine and fæces being passed in bed. His pulse is soft and rather slow, but not intermitting; and when awake his respirations are nearly natural.

This man was admitted into the hospital only two days since, and his history, so far as I can obtain it, is as follows:—About six months since his friends began to notice slight indications of failure in his mental faculties, and some unsteadiness in his

walk. These indications gradually increased, without the supervention of any sudden or severe sickness, until he has arrived at the entirely helpless condition, mentally and physically, that you see before you. For several years previous to the supervention of his present sickness, he had been addicted to the intemperate use of alcoholic drinks; and the same were continued for two or three months after his health began to fail.

With this review of the history and present symptoms, where is the seat of disease, and what the nature of the pathological changes which have taken place? The inability to maintain an upright position or to control the sphincters of the bladder and rectum, taken in connection with the impaired state of the mental faculties, show plainly that the seat of disease is within the cranium.

We may have inability to walk, with loss of control over the sphincters from disease of the spinal cord or its membranes; but in such cases the mental operations would not be impaired. But conceding the seat of disease to be the brain or its coverings, what is the nature of such disease? Is it a chronic inflammation of the cerebral substance? Or, is it a slow atrophy from defective nutrition? Or, again, can it be a mere functional derangement, consisting of impaired cerebral sensibility? To answer these questions reliably requires close examination of the patient, and an accurate knowledge of the symptoms that distinguish one pathological condition of the brain from another. Inflammation, either acute or chronic, involving the membranes or convolutions of the brain, causes increased heat; pain; restlessness; acuteness of sensibility; with positive mental derangement in the first stage; followed by effusion; paralysis; and coma, or continued insanity, in the second. If the inflammation involve the interior of the brain, there may be less evidence of mental derangement, but there will still be pain; indisposition to move the head; increased temperature; altered pupils; and more or less rigidity of the voluntary muscles, either of the neck or extremities.

At no period in the history of the case before us were any of these symptoms characteristic of cerebral inflammation present.

On the contrary, the head has been free from heat or pain, and the muscular system more and more flaccid and feeble in contractility, from the commencement of ill-health to the present time.

Mere functional disturbances of the brain are usually variable in the symptoms, and rarely cause a steadily progressive loss of flesh or of muscular strength. But when the nutrition of the brain has been impaired, by the long continuance of slowly-acting causes, and the texture begins to soften or atrophy from deficiency of atoms, the symptoms are those of simple impairment of function.

The patient is not, at first, either delirious or paralyzed. He becomes forgetful; is unable to maintain continuous thought and expression, often losing the thought in the middle of a sentence; while his gait becomes unsteady, and all his muscular movements enfeebled. The symptoms thus begun generally increase steadily, until the mental manifestations become simple, imperfect, and sometimes incoherent; and the muscular action so impaired as to render the patient incapable of walking, or even of maintaining the erect position. Only a few weeks since, a young man occupied a bed in this ward, who had been employed as a clerk in a grocery store, and had been regarded as a reliable and correct young man. He was first noticed to be despondent, without any known cause. Soon he became forgetful; then slow in his movements, and after some weeks wholly incapable of doing business. When admitted into the hospital, his face was pale; expression downcast and vacant; skin cool; pulse slow and soft; bowels inactive; and entire loss of all disposition to either mental or physical exertion. It was difficult to induce him to answer a question; and when he did his voice was weak, and his expression slow and interrupted. He neither asked for food or drink, but would sit in a chair or lie in bed from morning until night almost motionless. It was necessary to feed him in the same manner as a young child; and, at suitable intervals, call his attention to the necessity of evacuating the bladder and rectum. He complained of little or no pain, exhibited no spasmodic action of muscles or rigidity,

but sometimes, especially in the night, under some mental hallucination, he would attempt to wander about the house.

After observing him for some time, and trying without benefit several items of treatment, I became satisfied that the condition of the brain was that of anæmia and deficient nutrition, but not yet advanced to the degree of actual softening or disintegration. He was consequently put upon the use of syrup of pyrophosphate of iron, in doses of a teaspoonful three or four times a day, a diet of plain, nutritious food, such as milk, bread, rice, tender meats, etc.; and the use of an electro-magnetic battery once or twice every day. He was also encouraged to make efforts at walking, and, as soon as possible, to get out in the open air every day.

This course of treatment was carried out faithfully several weeks, and resulted in a slow recovery of the patient, who is now at his previous occupation. All the symptoms of the case before you have been, and now are, of such a character as to indicate a similar arrest of nutrition of the brain, more especially of the internal parts. But in this case the morbid process has probably continued until the texture has become so far changed as to be unable to perform its functions. In other words, some parts of the brain are in a state of *ramollissement*, or softening. If so, the prognosis is exceedingly unfavorable; and there would be little benefit from any kind of medical treatment. So long, however, as we cannot know positively that cerebral disorganization exists, it is our duty to prescribe such treatment as would be most likely to restore the patient, if the structural changes had not reached a stage incapable of repair. The indications are to increase the sensibility and activity of the mucous centres, thereby restoring more steady and efficient muscular action, especially in the involuntary muscles, and to improve the nutrition of the brain. Probably small doses of strychnine would fill the first indication, and some one of the phosphatic salts of iron the second, as well as any remedies that we could select. Hence, we will direct the following prescription:—

℞

℞. Strychnine,---------- 1 gr.
Nitric Acid, ---------- ℥j.
Simple Syrup, ---------- ℥j.
Water,---------- ℥ij.

Mix, and give a teaspoonful every six hours, diluted with sweetened water.

Also, one teaspoonful of the pyrophosphate of iron every six hours; making the medicines come alternately three hours apart. We will have him fed regularly with milk, bread, rice, etc.

The result you will be able to learn at a subsequent clinic.

Selections.

ON THE TREATMENT OF WHOOPING-COUGH.

By JOHN C. PETERS, M.D., of New York.

Is there any additional experience in the use of the decoction of chestnut leaves (castanea visca) in whooping-cough? Some time ago, Dr. Unzieker, of Cincinnati, gave it a fair trial in 30 cases, and felt satisfied that he had at last found a remedy to cope with this disease. It always gave decided relief in the first two weeks. First the cough was lessened and the patient rested easier at night, then the decline of all the symptoms became very rapid. He used three or four drachms of the leaves in boiling water, to be drank *ad libitum*, either hot or cold, and with or without sugar. Children do not dislike it.

The remedy is so simple, safe, and pleasant, that if this is not another instance of those tremendous exaggerations which so often make their way into the records of medicine, it should receive careful attention, especially as the remedy is so easily procured.

In the mild cases of whooping-cough, which generally last only two or three weeks, very little treatment is required. The suggestion of Dr. Snow, of Providence, to place small quantities of *carbolate of lime* in saucers about the room, where the child lives and sleeps, deserves attention as a prophylactic and disinfecting agent. It not only prevents others from con-

tracting the disease, and destroys the contagion of the disorder on the spot, but also helps the patient. For Dr. Snow says, in all cases in which he tried it, a marked effect in diminishing the frequency and severity of the cough was quickly noticed.

The carbolate of lime is almost as cheap as the chloride, and need not be made unpleasant, for only sufficient should be put in the saucers to render its odor barely perceptible. Some should also be put in the spit-cups, slop-jars, etc., in which the children expectorate or vomit. For it is not only the breath of the child, but its secretions and excretions, which convey the disease to others. Thus Dr. Aitken says the disorder was first introduced into St. Helena by the captain of a ship, who sent the clothes of some children with whooping-cough on shore to be washed. We have known the disease to be conveyed several miles in the winter-time by the mother of a nursing infant. The child nursed just before its mother left the house; she at once put on her cloak and furs, and thus shut in the infection; then went to see her sister's children, whom she took on her lap and fondled. They contracted the disease at the usual time.

It is very probable, that there would be many more cases of *pertussis mitior* than *gravior*, if the hygienic management of the little sufferers were better attended to, than it generally is. Mild cases, which often last two or three weeks, may easily be converted into severe ones, by shutting the patient up in close rooms, or even heated houses, until these become filled with poisonous emanations, which probably unite with other effete matters and increase the malaria many fold. It is especially in these cases that change of air does so much good. The patient is benefited even by removal to so short a distance as half a mile; a sail across a river is also beneficial, although the distance be short, especially if the house be well ventilated while the patient is absent. This is all the mystery in those cases in which children recover from an almost hopeless state, even in a few hours after they have been sent away from home.

From the very commencement the child should be well clad, and kept in the open air as much as the weather will permit. Next to bad air, the most injurious agent is improper food, consisting of rich, sweet, indigestible, or greasy articles. These things not only irritate the stomach, but cause risings of acrid gases and fluids, which almost excoriate the pharynx and larynx and superinduce a stomach or throat-cough in addition to the specific disorder. And each aggravates the other. A light but nourishing diet of bread and milk, hominy, rice, corn-starch,

farina, etc., with meat once a day, consisting of plain soup, the inside cuts of beef or mutton, chicken and fish without the skins; no fried potatoes, made gravies, or rich fricassees, etc., etc., will keep up the strength of the child and prevent all derangement of the stomach. Some bland or mucilaginous drink may be partaken of freely, like barley, or gum-Arabic water, flax-seed, or slippery-elm tea, etc. These will soothe and moisten the throat, and whole œsophageal and gastric mucous membrane.

It is not sufficiently known that in severe cases of whooping-cough, the stomach is singularly red and injected; and when it becomes inflamed, this is denoted not only by pain in the epigastrium, but also by the suppression of the glairy fluid, which should be thrown up by vomiting. In these cases, the little patient often lies in a state of complete exhaustion at the termination of the paroxysm of coughing, unable to discharge anything, either from the stomach or lungs, or even to whoop (AITKEN). Counter-irritation to the epigastrium, with or without aconite in soap—or weak hartshorn liniment to the back, are the most useful remedies in these cases. Even a few leeches to the stomach and a flax-seed poultice are not amiss. It is probably in these gastric cases, before they have advanced to far, that ipecac., has gained its great reputation.

The *first or catarrhal stage* of ordinary whooping-cough is like that of a feverish cold, and it is not until the fever remits and is about to pass away, that the cough which has previously distressed the patient, is followed by the characteristic whoop. The first stage may last from six or eight days to two or three weeks; but an experienced and observant physician will suspect the disease he has to deal with from the peculiar paroxysmal character of the coughs, which are divided by long intervals of comparative ease. Small doses of acetate of ammonia and ipecac., are useful in this stage: liquor ammoniæ acetatis ℥iss, syrupi ipecac., ℥ss. Dose: quarter, half, or whole teaspoonful in water several times a day, according to the age of the child; or ipecac., and spirits of nitre: spts. nit. dulce, ℥ij; syrupi ipecac., ℥ij; aq. cinnamomi ℥iss. Dose: quarter, half, or whole teaspoonful in a little water. Those who prefer it may give one or two drops of aconite; or two or three drops of digitalis; or one or two drops of gelsiminium, or quarter, half, or whole drops of tinct. of veratrum viride.

When the second or spasomodic stage sets in, the patient has a series of fits or paroxysms of severe coughing, occurring at irregular, but rather long intervals, and so rapid is the action

of the diaphragm, that the air is almost instantly expelled from the lungs, and the patient half suffocated, turns black in the face. At length the crisis approaches, the diaphragm relaxes, and a violent inspiration follows, accompanied by the characteristic *whoop*. This sound remits, but soon returns, and thus convulsive inspiration and expiration continue, till the patient is at length relieved by a copious expectoration, or vomiting, or both. The matters expectorated are frequently thick, viscid, and muciform. Those vomited are thick and glairy, of much tenacity, semi-transparent, and often very copious (Aitken). It is in this stage that alkalies are so very beneficial. Sub. carbonate of potash 20 grains; cochineal 10 grains; sugar, one-quarter oz.; water four oz.: rub together and strain. Dose: quarter teaspoonful four times a day for a child one year old; half a teaspoonful for one of two years; and a teaspoonful for one of four years. The cochineal is supposed by some to be an anti-spasmodic of some power, but it is more than probable that the alkali is the only efficient part of the prescription.

Dr. Hawley found the bromide of ammonium useful on account of its peculiar anæsthetic effect on the nerves of the larynx and pharynx. Dose: one or two grains thrice a day for infants; up to twelve grains for much older children.

The infusion of *wild thyme* slightly sweetened is said to effect great improvement of the spasmodic cough. Aitken thinks it is not very important which of the more decided sedatives or antispasmodics is selected, but thinks hyoscyamus and syrup of poppies are the safest and best. Still, there is no doubt that *conium maculatum* is milder and better than hyoscyamus, belladonna, prussic acid, or opium. Potassæ sub. carb. gr. 20; aq. fœniculi three and a half ounces; tinct. conii maculat. half ounce. Dose: quarter, half, or whole teaspoonful, according to the age of the child. In severe cases: substitute 1 drachm of tinct. belladonna, for the half ounce of conium; or ten minims of dilute hydrocyanic acid.

Vollant and others prefer the powdered *root* of *belladonna* alone, giving one-fifth of a grain, first once, then twice, and finally four times a day, until the paroxysms begin to subside, which will certainly be on the third or fourth day. Then it is to be given at much longer intervals.

Others prefer *prussic acid* alone. Acid. hydrocyan. dilut. *m.* iv; syrupi simplicis, vel misturæ amygdalæ one drachm; aq. pur. seven drachms. Dose: half or one teaspoonful for a child nine months old. Or pulv. ipecac. compos. half to one and a half grain; ext. conii maculat. one gr.; pulv. cinnamomi gr. ij;

sacch. alb. gr. iv; make a powder to be given at night, for children two years of age, when there is but little wheezing or vomiting, but a very troublesome night-cough.

The most frequent complication of this disease is acute *bronchitis*, when the mucus not only becomes deficient in quantity, but thick and viscid, teasing the patient with fruitless efforts to free it from the lungs, thus causing a frequent recurrence of the paroxysm. The alkaline treatment is the best here, with the addition of a few drops of aconite or digitalis. Or equal parts of aquæ laurocerasi, tinct. digitalis, and wine of antimony may be given in three, five, ten, or more drop doses.

When the bronchitis becomes more *chronic* and assumes the form of purulent inflammation, the pus secreted being formed into sputa and moderate in quantity, give: Misturæ ammoniaci one and a half ounce; aquæ cinnamomi, one and a half ounce; syrupi tolutani, half oz.; tinct. castorei, two drachms; tinct. opii camph., two drachms. Dose: one, two, or three teaspoonfuls, according to the age of the child, frequently (Paris). When the pus is thrown up pure as from an abscess and in large quantities, astringents are required. Aluminis, gr. 24; acidi sulph. diluti *m.* 12; syrupi rheados (poppies) half an oz.; aq. pur. two and a half oz. Dose: one to three teaspoonfuls every six hours (West). Or: aluminis gr. 25; extracti conii maculat. gr. 12; syrupi rheados two drachms; aquæ anethi three oz. Dose: one or two teaspoonfuls every three or six hours, for a child two or three years old (Golding Bird). Acidi nitrici diluti twelve drachms; tinct. cardamomi comp. three drachms; aquæ three and a half oz.; syrupi one oz. (Gibbs). One or two teaspoonfuls every two or three hours will cure in from two to fourteen days. Zinci sulphatis gr. eight; extracti belladonna, gr. two to five; aquæ four oz. Dose: one to four teaspoonfuls, two, four, or six times a day, for a child three years old.

If inflammation of the lungs set in, the treatment is nearly the same as for acute bronchitis. Or vini antimonii potassiotante, *m.* 30; vini ipecac., *m.* 10; tinct. aconit. rad. *m.* 5; tinct. camphoræ compos. *m.* 20; mucilag. acaciæ seven drachms. Dose: one or two teaspoonfuls every four hours, for a child four years of age (West).

But the most distressing accident is when the pleura becomes inflamed, for then the patient's sufferings are fearfully increased during the paroxysms of the cough. Then a roller bandage should be put on the chest to limit the movements of the ribs as much as possible. This may be moistened with an infusion

of digitalis, or aconite, or opium; and the ordinary internal treatment well followed up. But the results of nineteen *post mortem* examinations made by Graily Hewitt during a recent epidemic, showed that the most frequent and fatal lesion of the lungs, in children from one month to four years of age, was collapse of the lung substance, or a return to the fœtal condition, or *atelectasis*. This calls for the free employment of stimulants and as strong liquid nourishment as can be digested. Tinct. nucis vomica, quarter, half, or one drop every few hours; or, tinct. cantharidis dr. j; tinct. camphoræ compos. ʒj; tinct. cinchonæ compos. dr. 10. Dose: quarter or half teaspoonful every two or four hours. Or three to five, or ten drops of aromatic spirits of ammonia.

In the third stage a number of remedies have been recommended. Assafœtida is much esteemed, and is considered by some physicians to be a specific not only in this, but in every other stage of the disease. Aitken says, it should be given in an emulsion, in the dose of one or two grains to a child two years old, repeated three or four times a day, or even as often as every two or three hours. Tinct. assafœtida dr. j; tinct. opii *m.* 10; ipecacuanhæ pulv. gr. 10; aquæ two oz. Dose: one teaspoonful every three or four hours (Reece). Assafœtidæ puræ dr. j; olei amygdalæ dulc. gutt. 20; rub together, and add mucilag. acaciæ two oz.; syrupi altheæ one oz. Dose: one teaspoonful every two hours for a child two years old (Kopp). Ext. lactucæ viros gr. iv; assafœtidæ depur. gr. viij; sacch. lact. vel. alb. gr. 40. Make eight powders; one every two or four hours.

Musk and castor have been largely used in severely spasmodic cases. Tinct. castorei half oz.; spts. lavend. compos. two dr.; aq. camphoræ ad. two oz. Dose: quarter or half teaspoonful in sweetened water. Ext. pulsatillæ gr. j; pulv. rad. valerian minor gr. three to six; elæosacchar, fœnicul, half drachm. Make twelve powders; one from two to four times a day. Herb. ledi palustris (wild rosemary) fol. sennæ dr. j; pulv. ipecac. gr. four; aquæ fervent four ozs.; sacch. alb. half to one oz.; liquor ammon. anisat. one drachm. Dose: one to four teaspoonfuls every two to four hours. Highly recommended by Buttner. Ext. dulcamaræ gr. 20; kali tartar depur gr. 40; aq. fœnicul one oz.; vini stibiat. half drachm. Dose: five to twenty drops in water, every two, four, or six hours.

The external treatment has received great attention. Olei succini dr. 2; liniment saponis compos. dr. 10; mix for a liniment similar to Roche's. Rub one drachm upon the back and

chest, two or three times a day (HOOPER). Spirit. camphoræ half oz.; tinct. opii. dr. 2; olei succini dr. 2; olei amygdalæ half oz. Mix for a liniment to be rubbed on the chest, night and morning (SAVORY).

Tanner prefers tinct. aconite dr. 2: soap liniment dr. 12; or a mixture of equal parts of tinct. belladonnæ, glycerine, and camphor liniment, to be rubbed on the back every night.

Such is the abundance of good and useful remedies, that all new suggestions should be received with great caution.—*Medical Gazette.*

TREATMENT OF PARALYSIS BY HYPODERMIC INJECTIONS OF STRYCHNINE.

M. Gonzalez Echeverria, M.D., in a paper read before the Connecticut Medical Society, May 28th, 1868, narrated several cases of paralysis treated by him, by hypodermic injections of strychnine, with remarks on infantile palsy.

These cases were selected by him as evidences of subcutaneous injections, proving by themselves an efficient means of treatment.

Case 1. A soldier, after being kept on picket duty all night, in water up to his knees, was admitted into the Central Park U. S. A. General Hospital, with paraplegia. The limbs were blue and cold, without sensibility, up to the knees. Lithates were abundant in the urine. The bowels and bladder were torpid. By the application of electricity to the limbs, and the internal use of tonics and strychnine, the paralyzed condition was slowly relieved. One-sixtieth of a grain of sulphate of strychnine was injected below the knee. The operation was repeated four or five times, at intervals of three days, and from the first injection, the patient, to his great joy, could walk without crutches. A feeling of warmth was noticed after the first puncture, with marked diaphoresis.

Case 2. A gentleman, on account of a sudden exposure to cold, while playing tenpins, became paralytic in the right leg. The patient, from the onset, was in constant agony from pain. Slight temporary relief was obtained by the use of blisters over the hip-joint, and the employment of narcotics. Soon the muscles of the thigh and leg began to waste away, and hyperæsthesia persisted to such an extent that the slightest touch of the skin would cause excruciating pain. Chlorides were found in excess in the urine.

After one-fiftieth of a grain of strychnine was injected into the thigh, the application of electricity was resorted to—as the patient stated that electricity had given him some relief previously. After the first puncture, more power and warmth were felt all over the limb. The pain subsided, and for the first time he enjoyed a night of uninterrupted rest. Diaphoresis followed, and the pupils dilated. More or less gurgling of the bowels seemed to be one of the earliest effects of the subcutaneous injection of strychnine. At intervals of four days, the same dose of strychnine was injected three times more. Power was restored to the paralyzed muscles, by a tonic regimen, with electricity; the hot and cold douche to the limb, and two more subcutaneous injections of one-fiftieth of a grain of strychnine.

Cases 3 and 4. These cases were of simultaneous paralysis in two children, brother and sister; the boy one and a half years old, the girl three. They were seized with symptoms of spinal meningitis, produced by sitting on the wet grass. The children were seen after the acute stage of the disease was passed. The girl had lost all power of both legs and right arm. The boy was only paraplegic. Hypodermic injections of strychnine were suggested, which being approved by the attending physicians, he injected five times—once every three days—one-fiftieth of a grain in the legs of the boy and over the lower part of the spine, who was able to walk, with a little unsteadiness, in the course of six weeks. Tonics, warm baths, electricity, and strychnine by the mouth, finished the cure. The girl did not progress as fast. She had fourteen injections of one-fiftieth of a grain of strychnine during three months. She could stand or walk, but became fatigued very easily, and the arm and hand recovered power to grasp more firmly. Electricity and the same treatment were kept up as with her brother, but she was not cured, though benefited considerably, on account of the absence of the parents from New York.

In these cases—as in other similar cases—fibrillar contractions of the muscles in the limbs, lasting for a minute or two, were noticed.

Case 5. A boy four years of age, affected with paraplegia, which had existed for two years, was treated by him. The paralysis followed a fever. The muscles of both legs were much wasted from the knee down to the feet, which were affected with talipes equinus. The child could only move about on his knees. When first seen he was suffering with bronchitis, following scarlatina.

Local applications of electricity to the palsied muscles were

advised, with hypodermic injections of strychnine. The injection was practised in the anterior region of the limbs, one-sixtieth of a grain of strychnine being introduced in the tibialis anticus. Every third day, during four months, one-sixtieth of a grain was injected, also the daily application of electricity, for half an hour. The child recovered to such a degree that he could stand or walk, with the assistance of an orthopœdic apparatus.

Several more cases were described at length in his paper, but the five already mentioned show the importance of subcutaneous injections of strychnine in the treatment of paralysis.

The results observed by the author, and by the physicians quoted in his paper, "strongly indicate the cardinal part of the sympathetic in the pathogeny especially of infantile paralysis."

Strychnine administered by the mouth, or hypodermically, has an entirely different effect. By the former, the quantity may be increased and repeated unsuccessfully; while by the latter—in a smaller dose—the lost muscular power is restored.

As to the manner of performing the injections, his own language will explain: "Generally, I insert the trocar of the syringe into the paralyzed muscle, and draw part of it out to avoid throwing the solution directly into the bloodvessel. The injection should be practised very slowly; by having a solution with one-hundredth or a smaller fraction of a grain to a drop, the strychnine may be so diluted as to allow carrying its action at the same time into more than one of the palsied muscles. The general effects are more rapid and decided when the solution penetrates no deeper than the cellular tissue, or when the puncture is made along the spine."

ARSENIC IN THE TREATMENT OF UTERINE AFFECTIONS.

Arsenic, according to Waring and Stillé, has been used with decided benefit in carcinoma of the uterus, in irritable uterus, and in menorrhagia, by Dr. Hunt, of Dartmouth, England. Its value in atonic menorrhagia has been confirmed by the celebrated Dr. Locock, who states that he has employed it with great success in this and many other uterine affections. He thinks it acts specifically. In one case of cancer of the uterus, in which no relief was obtained from twenty-four grains of morphia, great ease and benefit accrued from small doses of Fowler's

Solution. Dr. Locock thinks highly of arsenic in this class of diseases. In menorrhagia, leucorrhœa, and uterine hemorrhage, in threatened abortion, and after delivery, Dr. A. Burns speaks of arsenic as a most reliable remedy. In leucorrhœa he gives five drops of Fowler's Solution three times a day, till a cure is effected. Dr. Simpson has used it successfully in amenorrhœa and dysmenorrhœa, as well as in that peculiar affection of the bowels characterized by copious discharges of membranous shreds, and accompanied by great emaciation and a long train of neuralgic and other nervous symptoms.

M. Imbert Gourbeyre has drawn attention to the great utility of Fowler's Solution in the treatment of vulvar pruritus. Other physicians have found it more useful in ulcerations of the os uteri than the application of nitrate of silver and other caustics. In fact, it is as beneficial in various ulcerations of the mucous membranes as it is well known to be in many ulcerations and eruptions upon the skin.

As regards the *modus operandi* of arsenic, it may be put down as a tonic when given in small or medicinal doses. It then excites a sense of warmth in the stomach and bowels, increases the appetite, and in some degree also the fæcal and urinary discharges. The skin becomes warmer, the pulse fuller and more frequent, the muscular system more active, and the whole organism invigorated, freer and lighter in its movements, and even the mind improves in activity and power. Such a remedy is well calculated to remove chronic congestions, and even chronic inflammations, such as depend upon a feeble rather than a sthenic condition of the vascular and uterine system.

In larger doses it acts as an irritant, like pepper, mustard, ginger, and may unquestionably stimulate the stomach and promote the action of the bile, pancreas, and mucous glands, and thus favor nutrition.

The somewhat fanciful Germans suggest that it may act not only as a tonic, or rather stimulant, but as a delicate caustic to new formations and those with fragile attachments. Others say that the long-continued use of arsenic causes chronic anæmia, coupled with disintegration of the blood corpuscles, diminution of the proportion of fibrin, and general impairment of the vital principle upon which the normal qualities of the blood depend. Hence they infer that it acts as an antagonistic agent against hyperæmia, congestion, chronic or subacute inflammation, etc. In fact, they declare that it is the most certain and powerful emmenagogue of the whole Materia Medica. The typical cases of amenorrhœa in which its use is most appropriate, are thus

described by Vogt:—They occur in persons of a torpid and relaxed constitution, and disposed to mucous accumulations and menorrhœal discharges; in other words, there is a general atony of the system in which the uterus participates, and of which the capital sign is leucorrhœa occurring exclusively, or in an aggravated degree about the catamenial period. When there is a great want of tone in the system it may have to be aided with bark, iron, and other tonic medicines. It is thought to be almost as specific against uterine leucorrhœa as copaiba is against gonorrhœa, and to act in a somewhat similar manner. Kopp has recommended it in *sterility* arising from uterine leucorrhœa, or depending upon a torpid state of the sexual organs. He also states that it acts as an excitant of the venereal propensity.

It is very easy to understand the action of sabina in these disorders, and to expect and anticipate the benefit which will almost surely follow its use. But Kopp has recommended it in more complicated states, such as *dysmenorrhœa*, particularly in unmarried females, and when it is attended with expulsive pains and discharges of scanty, dark and clotted blood, or when, as in other cases, there is an augmented flow taking place irregularly, ceasing, then reäppearing, etc. He usually prescribed it in conjunction with borax, and states that it relieves *menorrhagia* when this acts in congestive uterine affections in the same advantageous way that it does in plethora, in the determination of blood to the head, and in apoplectic congestions, against which Dr. L. Piquot considers that it operates by reducing in a remarkable manner the excess of the red globules of the blood, which, in these cases, he supposes to exist in a morbid and dangerous degree, having witnessed more relief from the use of liquor arsenicalis in combination with liquor potassæ, than from the local abstraction of blood, blisters, setons, etc.—*Medical Gazette.*

Inhalation of Oxygen after Tracheotomy.—Dr. Jacobi, of New York (*Medical Record*), after opening the trachea in a case of croup, finding the patient to suffer much from difficult respiration, resorted to the inhalation of oxygen gas mingled with common air, and introduced through the canula by an elastic tube. The result was very satisfactory. The child became quiet, and was finally so well satisfied with it that he would not allow the tube to be withdrawn. The relief, however, was transient. Next morning convulsions came on, but as soon as the oxygen was inhaled they ceased. The child finally died.

Book Notices.

A Handbook of Vaccination. By Edward C. Seaton, M.D., Medical Inspector to the Privy Council. Philadelphia: J. B. Lippincott & Co. 1868. Pp. 383. Price, $2.25. For sale by S. G. Griggs & Co., Chicago.

This is a very full and convenient treatise on Vaccination, by a very competent author. It contains fourteen Chapters, on the following topics:—Of the natural Cow-Pox; Of the Horse-Pox; Of the Pocks in other Animals; Of the relation of Cow-Pox and Horse-Pox to Human Variola; Of Vaccine, or Cow-Pox in the Human Subject; Of Vaccinating; Of the Maintenance of Lymph-Supply; Of the Conveyance and Storage of Lymph; Of Skill and Success in Vaccinating, and of Insusceptibility; Of alleged degeneration of Lymph, and of recurrence to the Cow; Of the Protection which Vaccination affords; Of Revaccination; Of Stamping-out local Outbreaks of Small-Pox; Of the Objections to Vaccination, and the alleged dangers of the practice.

It is a very instructive volume for the student, and convenient for reference in the library of every practitioner.

Constipated Bowels: The various Causes and the different Means of Cure. By S. B. Birch, Member of the Royal College of Physicians, of London, etc., etc., etc. From the third London Edition. Philadelphia: Lindsay & Blakiston. 1868. Pp. 181. Price, $1.25.

The general scope of this work is sufficiently indicated by its title. The author discusses the subject with ability, aided by practical experience.

Conservative Surgery, in its General and Successful Adaptation, in Cases of Severe Traumatic Injuries of the Limbs, with a Report of Cases. By Albert S. Walter, M.D. Pittsburgh: W. S. Johnston & Co. 1868. Pp. 213—no binding.

This is a monograph, in paper cover, of 213 pages. After a few pages of introductory remarks on the value of *Conservatism* in Surgery, the remainder of the work is occupied by the detailed history of a considerable number of cases of severe injury to the extremities. As a collection of cases (more than fifty in number) showing the extent to which severe injuries may be repaired and limbs saved, that by a less conservative treatment would have been doomed to amputation, this work is of much value. Dr. Walter also claims that the most free exposure of wounds to *pure* air is not injurious. On the contrary, he advocates leaving wounds open, and, if need be, adding incisions sufficient to give the most free exit to extravasations of serum, blood, or pus. The author has made a valuable addition to the surgical literature of the profession.

Editorial.

Transactions of the American Medical Association.—We have just received the nineteenth volume of the Transactions of our national organization. Like most of the preceding volumes, it is published in excellent style. It contains 497 pages, illustrated with several maps and plates. The contents are made up of the record of proceedings of the Annual Meeting in May, 1868; short reports from the officers of the several sections; the annual address by the President, S. D. Gross; and valuable reports and papers on the following subjects:—Medical Education; Medical Literature; Insanity; Provisions for the Chronic Insane; Topography, Climatology, and Epidemic Diseases of W. Virginia; Climatology and Epidemic Diseases of the District of Columbia; Topography, Meteorology, and Epidemic Diseases of Texas; on the Diseases of Pennsylvania; on the Conveyance of Cholera from Hindostan through Asia, Europe, and America; Plans for the Collection and Statistical Arrangement of Facts, etc.; on Ophthalmology; Treatment of Club-Foot without Tenotomy; New Method of reconstructing the

Lower Lip; New Mode of treating Congenital Talipes; Treatment of Syphilis by Hypodermic Injections; Safe and effectual Operation for the radical Cure of Varicocele; on American Medical Necrology. All these are important topics, and though none of the papers are of tedious length, they possess decided merit.

If any members of the Association, or others, desire a copy of this work and have not secured it by the payment of the annual assessment for 1868, they can still obtain it by forwarding five dollars to Casper Wister, M.D., Treasurer, Philadelphia.

Monument to Anæsthesia.—Mr. Thomas Lee, of Boston, sometime since: made a liberal donation for a monument to commemorate the discovery and application of Ether as an anæsthetic in surgical practice.

The work has been completed and placed in the Public Garden, adjoining the Common, in Boston.

It was recently surrendered to the guardianship of the City Authorities by a dedicatory address and presentation by Dr. Henry G. Bigelow.

The following are the proceedings, with a description of the monument, as copied from the *Boston Daily Advertiser*, by a correspondent of the *Cincinnati Lancet and Observer*:—

Mr. Mayor:—It was the wish of the late venerable gentleman, who caused this monument to be erected, to rear an enduring memorial of the discovery in Boston, from which dates the era of painless surgery; and also that on some fitting occasion it should be offered for the acceptance of his fellow-citizens.

In no act of a long life, characterized by many deeds of liberality, by the exercise of a refined and cultivated taste of nature and for art, and by a discriminating judgment of men and of passing events, did he show greater discernment, than when he organized this work; and although he did not live to see it executed, he had so far supervised its plans, and so intrusted them to skilful hands, that no difficulty was met in completing its beautiful design in detailed conformity to his wishes.

This monument is intended, in the words of the tablet, which were written since his death, "To commemorate the discovery that the inhaling of ether causes insensibility of pain; first

proved to the world at the Massachusetts General Hospital, in Boston, October, A.D. 1846," by its appliance during a protracted dissection, which, when followed by one of the severest operations known to surgery, was a final and conclusive test in a close and connected series of successful experiments, which proved that pain could be annulled: first, with certainty, no matter who the individual; secondly, with completeness, no matter how great might be its degree; and thirdly, with safety. These three points were all absolutely involved in the discovery, and these alone. Before the consecutive experiments which culminated in those here recorded, neither of these points had been established by conclusive proof. The world was ignorant of the great truths they asserted, the discovery had not been made.

The philanthropist had indeed yearned to relieve suffering humanity; the poet had prophetically announced a world free from physical pain; the philosopher had made fruitless efforts to unveil the hidden secret. Instances of accidental insensibility had been observed. Here and there an ingenious man had devised and tried some single experiment with greater or less success, and then abandoned the pursuit; or tantalized by a possibility at one moment in his grasp, and in the next eluding it, stimulated by a flattering promise of achieving something at once practical and useful, had followed up his experiments hopefully, until some great public failure disheartened him, made his proselytes incredulous, and left the world still to suffer pain.

Men had been made insensible to pain through mental excitement, or by the agency of mesmerism or hypnotism, by the dead drunkenness of alcohol, the narcotism of opium, the inhalation of nitrous oxide and other gases, and even by the vapor of ether. For years all this had been known to be possible, but it attracted little attention. These previous experiments, instituted by different persons, were inconclusive, because they led to no constant result; the anæsthesia could not be relied on, or it was not demonstrated that it could be relied on, either sure to occur, or as proof against the severe forms of pain. The question of danger from this extraordinary trance was also unsettled. No consulting board of surgeons would have dared to sanction the production of prolonged unconsciousness during an operation, before the series of consecutive experiments were made here in Tremont St., and at the hospital. There had been a lack of perseverance or of good fortune in the experimenters, or an imperfection in their materials or method, and

the future discovery, which was soon to burst upon the world, halted for an interval of years at this imperfect stage. The whole progress of all invention and discovery has been a monotonous catalogue of such imperfect efforts and such failures. But when these consecutive experiments had been made in Boston, the discovery had been made; and in grateful and unhesitating recognition of it, the entire civilized world simultaneously rose up to hail it with acclamatory welcome.

Thus was made the discovery, and thus was begun the career of anæsthetic inhalation. Modifications, imitations, and substitutes have sprung up in all civilized countries. New processes and new materials will yet be furnished by science, or demanded by convenience or economy; but after more than twenty years of its successful trial, nothing has been found to surpass, in its efficiency or unqualified safety, the original ether then used.

To commemorate the triple and demonstrated discovery, not of a probable, an uncertain or untrustworthy, but of an inevitable, complete, and safe anæsthesia, this monument has been erected in a city which was the humble instrument of Divine Providence in diffusing to the nations this incalculable blessing.

I well remember when the eloquent and gifted man, whose brazen effigy on yonder pedestal so powerfully recalls his living presence, in an address delivered at the Medical College on the 4th of November, 1846, said, with an unconscious foreshadowing of what was soon to happen:—"I cannot suppress the remark that the great principle of analogy seems to authorize the hope that * * * further discoveries may be expected scarcely less brilliant than that of vaccination." How even far this prophetic inspiration fell short of the reality! How little did he dream that the lapse of a few brief days would herald to the earth the greatest boon ever accorded to the physical welfare of mankind; days of discovery that forever silenced the dreadful shriek of agony which many of us can yet recall in the surgical amphitheatre of the institution whose name is now immortalized, that stilled the moan of the soldier stricken down upon the battlefield, assuaged the pangs of disease, softened the approach of death, and lent a sweet obliviousness in what was once its hour of anguish to all animal existence, from the poor suffering brute up to humanity, to man born of woman, and to woman of whom man was born.

In the name and at the request of my venerable friend, the late Mr. Thomas Lee, of his executors, and of the gentlemen to whom he intrusted the arrangement of this ceremony, I beg to offer this memorial to you, sir, and through you to the city of Boston.

The remarks of Dr. Bigelow elicited considerable applause. Mayor Shurtleff responded as follows:—

In behalf of the municipal authorities of Boston, I now formally receive from you the gift of Mr. Thomas Lee; and promise that it shall be watched with care and protected from injury. And may this elegant structure long remain unimpaired by time, a memorial of the greatest boon ever vouchsafed to suffering humanity, and a monument of the gratitude of one of Boston's most worthy citizens.

The exercises were closed with an appropriate prayer by Rev. Dr. Lothrop, and after lingering about the monument for a while to admire its beauty and fine proportions, the audience dispersed.

We append a description of the monument, copied from the "History of the Water Works," by Nathaniel J. Bradlee, Esq., President of the Cochituate Water Board.

The form of the monument is suggested by mediæval types, modified by the nature of the white Concord granite used in its construction. It is about thirty feet in height, and arises from a square basin. Its base is cubical, leaving on each vertical face a niche containing a spouting lion's head, with sculptured water-lilies and other aquatic plants. Upon this base or plinth rests a surbase, adorned with mouldings from which arises a die, bearing upon each of its four sides an inscription, surmounted by a bas-relief in marble. These are sunk in the tympana of four pointed and cuspidated arches, supported each by two stunted shafts of red Gloucester granite, the capitals of which are enriched by poppies and oak leaves, this decoration being carried around the monument on the same level in a band or string course.

These arches form a canopy, square in plan, from which the structure diminishes by a series of mouldings to the base of a grouped quadripartite shaft of polished red granite. Its capital, which is decorated with oak leaves, bears on its abacus a group setting forth the story of "the good Samaritan," the type of the relief of suffering.

The inscriptions and bas-reliefs on the four sides are successively as follows:—

I.
To commemorate
the discovery
that the inhalation of ether
causes insensibility to pain.
First proved to the world
at the Mass. General Hospital
in Boston,
October, A.D. MDCCCXLVI.

The bas-relief accompanying this represents a surgical operation in a civic hospital, the patient being under the influence of ether.

II.

Neither shall there be any more pain.

[Revelation.

With an allegorical bas-relief of the Angel of Mercy descending to relieve suffering humanity.

III.

In gratitude
for the relief
of human suffering
by the inhaling of ether,
a citizen of Boston
has erected
this monument,
A.D. MDCCCLXVII.

With a bas-relief of a field hospital, with a wounded soldier in the hands of the surgeons.

IV.

This also cometh forth
from the Lord of Hosts,
which is wonderful
in council
and excellent
in working.

[Isaiah.

The bas-relief accompanying this inscription is an allegory of the triumph of science. B.

Mortality Report for the Month of September:—

The monthly report for September showed 133 deaths from cholera infantum, 78 from convulsions, 44 from diarrhœa, 22 from dysentery, 29 from typhoid fever, 15 from hydrocephalus, 39 from phthisis pulmonalis, 27 from tabes mesenterica, 30 from teething, and 10 from teething and diarrhœa. The total mortality was 736; 382 males, 354 females; 108 married, 628 single; 9 colored, 727 white. In September of last year the deaths were 507, an increase over this year of 229. In August last the total was 944, a decrease of 208.

The highest mortality was of children under one year, 277; one year to three, 218; between 20 and 30 years, 49.

The nativities were: Africa, 1; Austria, 1; Bermuda, 1; Bohemia, 7; Canada, 6; Chicago, native, 158; foreign, 28; United States, other parts, 107; Denmark, 1; England, 9;

France, 1; Germany, 70; Holland, 4; Ireland, 52; Italy, 3; Norway, 10; New Brunswick, 1; Scotland, 1; Sweden, 17; Wales, 1; unknown, 1.

The highest percentage of deaths in the wards was in the Seventh, being 112, one in 195 of population; the lowest in the First ward, being 9, or one in 1332. There was 1 death in Bridewell; County Hospital, 12; Home for the Friendless, 44; Half-Orphan Asylum, 1; Hospital of the Alexian Brothers, 1; Marine Hospital, 2; Mercy Hospital, 3; Protestant Orphan Asylum, 1; Immigrants, 19.

The deaths in the several wards during September were: First, 9; Second, 25; Third, 27; Fourth, 36; Fifth, 42; Sixth, 46; Seventh, 112; Eighth, 48; Ninth, 34; Tenth, 38; Eleventh, 33; Twelfth, 74; Thirteenth, 44; Fourteenth, 43; Fifteenth, 64; Sixteenth, 26.

THE DOG NUISANCE.

The inspectors' reports showed that during the month, 963 dead dogs had been removed in the South Division; 1615 in the West Division; and 465 in the North Division; total, 3043.

THE OPHTHALMOSCOPE IN DISEASES OF THE NERVOUS SYSTEM.—M. Bouchut has just sent to the Academy of Sciences, of Paris, the results of his more recent researches on the utility of the ophthalmoscope in diagnosticating diseases of the cerebro-spinal system. Through the novelty and interest of the subject we are induced to sum up briefly the more striking features of this memoir. Most of the diseases of the membrane of the brain and spinal cord being accompanied by optic neuritis, neuro-retinitis, inflammation of the choroidal membrane and papillary atrophy, it can be understood how the ophthalmoscope enables us to detect in the interior of the eye disorders of circulation, of secretion, and of nutrition, which indicates an organic disease of the cerebro-spinal system. It is through the anatomical and physiological connections of the eye with the spinal cord and brain, that we may explain the law of coincidence of optic neuritis with organic injuries of the nervous system. Each time that some violent impediment to cerebral circulation is brought on by the existence of some injury of the cerebrum and of the spinal cord, papillary and retinal hyperæmia is the consequence.

When it is the brain which is the seat of acute or chronic phlegmasia, the inflammation may extend to the eye by following the course of the optic nerve. On the other hand, diseases of the anterior columns of the cord may, through the anastomosis of the parts with the great sympathetic nerve in the situation of the two first dorsal pairs, produce in the eye various phenomena of papillary hyperæmia, which brings on, at a subsequent period, wasting of the optic nerve.

These facts show through what mechanism diseases of the nervous system stamp themselves on the eye so as to be detected by the ophthalmoscope. Other results are mentioned by the author, which may be of use whilst determining the diagnosis. Thus the optic neuritis and neuro-retinitis, produced by the acute or chronic diseases of the nervous system, are generally observed in both eyes; in cases of injury of the brain, or its membrane, optic neuritis is habitually more marked in the eye corresponding to the hemisphere which is more seriously altered; changes of the optic nerve and retina, complicated by disorders of sensibility, intellect, and movement, invariably indicate an organic disease of the encephalon. It may be added, that the alterations of the optic nerve and the retina should not be isolated from the other symptoms of the morbid condition. When considered thus, detection of their presence gives to the diagnosis an undeniable certitude.

The author concludes by naming the diseases of the nervous system in which optic neuritis and neuro-retinitis are observed, and he draws up the following list:—Phlebitis of the sinuses, acute or chronic meningitis, chronic encephalitis, cerebral hemorrhage, tumors of the brain, contusion and compression of the brain, chronic hydrocephalus, abscess of the brain, acute myelitis, locomotor ataxy, essential or idiopathic contraction, and certain cases of epilepsy, of paralysis, or of neurosis, associated with an organic lesion of the nervous substance.—*Lancet.*

Nasal Therapeutics.—At a recent meeting of the Liverpool Medical Institution, reported in the *British Medical Journal*, Dr. Banks, one of the members, made the following extremely practical remarks on the Application of Remedies to the Nostrils and Larynx:—

"Weber, of Leipzic, discovered fifty years ago that when a column of water was passed along one nostril, when it touches the soft palate, it causes it to rise so as to shut off the nasal from the pharyngeal cavity, so that the fluid is compelled to return through the other nostril. Weber, of Halle, first put the

principle into practice; and in 1864, Dr. Thudichum invented an instrument, and published some papers on the subject. The points to be attended to in using the instrument were the following: 1, the nozzle should fit the nostril accurately; 2, in children and nervous people, the full stream should not be turned on at once; it should be allowed to pass in gently at first, and then gradually increase in volume and force; 3, the current should be reversed occasionally. Cold water is irritating; and, therefore, tepid water, or a solution of an ounce of salt in a pint of water, may be used, followed by a deodorizer, as Condy's fluid, liquor carbonis detergens, or especially carbolic acid, and afterwards a stimulant astringent, as alum (one drachm to the pint), sulphate of zinc or copper (from ten to thirty grains to the pint), etc. The solution should not be too strong at first. The instrument was also useful in some surgical accidents, such as a foreign body in the nostril and severe epistaxis, when some dilute hæmostatic should be employed. Dr. Skinner had been practically making use of this principle before Dr. Thudichum's paper appeared, the instrument employed being a Higginson's syringe. The author had found Mr. Bryant's mode of treating nasal polypi, by blowing tannin into the nostrils through a quill, very satisfactory in some cases, especially soft and gelatinous polypi. Another troublesome affection—a chronically swollen and thickened condition of the nasal and palatine mucous membrane—was benefited by the administration of iodide or bromide of potassium; but local astringents were also useful, and were best applied by means of the spray producer. The best applications were, glycerine of tannic acid (one scruple to one ounce of water), or a solution of iodine, with a small quantity of carbolic acid. Speaking of affections of the throat, the author observed, that of the various instruments devised to bring remedies into contact with the air-passages, the spray producer was the best. Its use was very great in chronic laryngeal affections, and also in many acute affections, as putrid sore throat and scarlatinal cynanche, diphtheria. The spray producer could not be employed with very potent remedies, such as strong solution of nitrate of silver. A piece of whalebone, bent at an obtuse angle near the end, and having a brush (better than a sponge) attached to it, was the best instrument for applying these. Care and dexterity are requisite in using it."—*Med. and Surg. Reporter.*

The Use of Pepsine in Infantile Diarrhœa.—James S. Hawley, M.D., of Greenpoint, L. I., advocates the use of *American*

pepsine in the diarrhœa of infants, for the purpose of converting the ingesta into nutriment. The food going through the intestinal canal in an undigested form, becomes an irritant. And this is not all: the food does not always remain a simple, foreign substance, but undergoes putrefaction, decomposition adding new and more active sources of disease.

The indications in this disease are as follows:—*First*, to remove all sources of irritation from the quality of the ingesta; *Secondly*, allaying irritation by sedatives; *Thirdly*, artificial digestion by the administration of pepsine.

M. Corvisart and M. Barthez, of Paris, have made use of pepsine, both in adult and infantile cases, with success.

Dr. H. has been in the habit of administering pepsine in the diarrhœa of fed and teething infants for several years, with favorable results.

Cases are detailed by him, where the following simple prescription terminated the disease:

℞. Am. Pepsine, Subnit. Bismuth, āā gr. v. every three or four hours.

℞. Am. Pepsine, Subnit. Bismuth, āā ℥j.; Pulv. Opii, gr. j.; divided into twelve powders, and one given every two to four hours, according to circumstances.

In conclusion, he commends pepsine in the treatment of infantile diarrhœa, especially during the period of dentition. It has no noxious or perturbing qualities, and to some extent has borne the test of experience.

Division and Excision of Nerves.—Some months since, a case occurred in Paris, which attracted much attention, and caused considerable speculation. A woman received a wound just above the wrist, which completely divided the median nerve, notwithstanding which the peripheral end of the nerve was painful when touched, and the fingers retained the property of feeling. Some observers sought to explain the retention of sensibility by supposing an anomalous distribution of nerves, but Professor Richet believed the painful impression produced by touching the peripheral extremity of the nerve to be due to the presence of *nervi nervorum*, lately discovered by M. Sappey; and that the retention of sensibility by the fingers was in consequence of the corpuscles of tact being supplied by filaments from the radial and ulnar nerves, as well as the median, as demonstrated by Cruveilhier and Robin. In consequence of the interest manifested in the above case, Dr. J. F. Miner has been induced to record in the June number of the *Buffalo Med-*

ical and Surgical Journal, three others of a similar nature, which have occurred in his practice. A man received a gunshot wound of the arm, the ball passing directly through the median nerve. False anchylosis eventually ensued, and the pain from the receipt of the injury was intense and indescribable. Twenty-two weeks from the time of injury three inches of the nerve, which was found closely involved in the cicatrix, were removed, the pain ceasing immediately. *Sensation* was at no time lost, but was at first somewhat diminished along the anterior portion of the forearm and hand.—The second case was one of cystic tumor of the arm, which had existed five years, latterly becoming exceedingly painful. It so involved the musculo-spiral nerve that the removal of the tumor necessitated the removal of a portion of the nerve. This was followed by loss of motion, and in great degree of sensation, of all the parts supplied by the nerve. In the third case, a wound dividing all the flexor tendons of the middle, ring, and little fingers, the ulnar artery and nerve, *sensation* was almost entirely lost immediately after the injury, but was afterwards perfectly regained, the wound healing rapidly and the nerve, of course, uniting.

Present State of Health in London.—It is stated that (*Lancet*, July 11, 1868) there is a rapid and serious increase of diarrhœa in London, and other large towns. In the week ending June 6th, the deaths from this cause in London were only 27. In the four following weeks they were 31, 66, 171, 286. In the earlier weeks of the present unusual heat, according to Dr. Glover, the most noticeable effect upon health was a degree of asthenia, with more or less discomfort in the stomach and bowels. Diarrhœa had not shown itself to any serious extent. The mortality of London and the large towns was very low. It, has, however, gone rapidly up. The mortality, instead of being 19 per 1000, was last week at the rate of 25 in London, 26 in Liverpool. Of the 577 deaths from zymotic diseases in London, 286 were from diarrhœa, 19 from "cholera," or choleraic diarrhœa. Of the 286 persons, 230 were children under one year of age. It is probable that we have not seen the full development of this complaint, unless, indeed, we have an unlikely change in the weather. The meteorological character of the season is such as to throw light on the causation of diarrhœa. A very high temperature and extreme drought are conditions that generate this complaint on an epidemic scale. The fruit theory of its causation is not tenable: witness the age of its principal victims.

Health of London.—During the last week in July, the mean temperature of the air was 69.2°, or 7.6° above the average of the corresponding week in 50 years, according to Mr. Glaisher's observations. If anything, there was a little less heat than in the week preceding, but the difference was not sufficient to avert the unfavorable influence which great heat combined with continued drought always exercises on the populations of great cities. The registered deaths amounted to 1885 in the week, or more by 243 than were recorded the week before, and 310 more than the weekly average of the season. The deaths from diarrhœa have risen from 340 to 442, and by the more serious choleraic form of disease from 37 to 58. It is to be noticed that the mortality from diarrhœa, unlike that from true cholera, is pretty equally diffused through the various water-fields of London. Zymotic disease caused 800 deaths, or 43 per cent. of the total mortality, the corrected average being only 631 deaths from this class of causes. Of the 58 deaths returned under the head of "cholera," 38 were of children under 1 year of age, 8 aged 1 year, and 4 between 2 and 5 years, leaving 7 cases of adult death resulting from attacks of cholera not exceeding thirty hours' duration.—*Lancet*, August 1, 1868.

Personal Appearance of Virchow.—A correspondent of the *Cincinnati Lancet and Observer*, writing from Berlin, gives the following description of the great pathologist: Instead of the commanding or inspiring physique we had anticipated, we beheld a small man, with a short, quick, determined step, giving a nervous twitch to his whole body in progression; a face stamped strongly with the national characteristics, but chastened by hard study; a forehead expanded in every direction, with the lines that deep thought alone produces; a peculiar glance, such as you have often noticed from eyes accustomed to microscopic research, lending rather a furtive expression which is perhaps increased by the spectacles which he constantly wears; delivery slow, distinct, the purest German, no jingle of rhetoric, scarcely a gesture; merely a dictum which the lecturer deposes as law, without being at all dogmatical, and which is law.—The writer adds that he lectures daily from five to seven hours, on medicine "and politics," and that he is an earnest and powerful advocate of the liberal party, and the chief of the opposition to the divine right of kings.

Tobacco a Cause of Bald Heads and Gray Hair.—Dr.

D. B. Hoffman states (*Pacific Medical and Surgical Journal*, June, 1868) that a large proportion of the young men in California are bald-headed and have gray hair, which is not the case with females. This he is inclined to attribute to the excessive use of tobacco by the men. In support of this view he relates the case of one of his patients, under forty years of age, who had been in the habit of using tobacco to excess, and had been for 5 or 6 years both bald-headed and gray-haired. With great resolution he abandoned the use of tobacco: the result was that he entirely recovered his health, which had been bad; his whole head had become covered with a luxuriant growth of fine black hair, and he lost the sallow, beeswax hue of skin so common in those who use tobacco to excess.

Death from Chloroform.—Mrs. Elizabeth Hammon, aged 35, mother of three children, apparently a healthy woman, went to a dentist (Dr. McDowell) April 16, 1868, for the purpose of having some teeth extracted. Thinking she could not endure the pain, she requested the doctor to administer chloroform; and, as he had given it to her once before (about six months since) without any bad effect, he consented to administer it again, and, pouring about two drachms of chloroform upon a sponge, held it a short distance from her face. After she had made three or four inspirations her respiration ceased; he felt for the pulse and found she had none. Artificial respiration was commenced at once, and stimulating applications applied over the heart and to the extremities, but to no effect. She made but two or three efforts at inspiration after he first noticed something was wrong. An autopsy could not be obtained.

The Early History of Syphilis in China.—Dr. Geo. Thin, of Shanghai, China, contributes to the *Edinburgh Medical Journal* some interesting historical notes on this subject. He was assured by many Chinese scholars that syphilis has been known to exist in China for many centuries, and he therefore undertook, with the assistance of a learned native antiquary, to hunt up the records. He finds that in the seventh century the venereal chancre was described under a specific name, which places its nature beyond a doubt, and that from this time onward there are various allusions to it, although in modern times the more ancient notices have in a great measure been overlooked, partly from change of nomenclature, and partly from the fact that the works in which the notices occur are not likely to come before the general practitioner. Even anterior to the

Christian era, there are many traditions and vague references, which are generally accepted as indicating syphilitic diseases. The earliest of these is to be found in a collection of odes made by Confucius five hundred years B.C.—*New York Med. Jour.*

In consideration of the numerous victims of homœopathic treatment, a decree of the Emperor of Russia prohibits the practice of homœopathy in the entire territories of Russian America.—*Union Medicale.*

Medical Faculty of Paris.—M. Denonvilliers, Professor of Operative Medicine, has been transferred to the Chair of Clinical Surgery in this faculty, in place of M. Jarjavay, lately deceased.

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H. O. WALKER, M.D., Demonstrator of Anatomy.

THE REGULAR TERM

Will commence on Tuesday, February 2d, and continue until June 5th. The fees for the regular course are as follows: Lecture fees, $50; Matriculation fee, $5; Dissecting Ticket, $5; Hospital Tickets (for one year), $6; Graduation fee, $25.

THE PRELIMINARY TERM

Will begin on Tuesday, November 3d, and continue until the commencement of the regular term. This course will be principally clinical. A fee of $15 will be charged for this course, but will be credited to the student on payment of the fees of the regular term. For further particulars apply to

THEO. A. McGRAW, M.D., Secretary,
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Assistant to the Demonstrator of Anatomy.

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Graduation Fee,	20.00
Matriculation Fee,	5.00
Dissecting Ticket,	5.00
Hospital Ticket,	6.00

The Summer Reading and Clinical Term commences on the first Monday in April, and continues until the first Monday in July; and is free to all matriculated Students of the Coliege. Boarding, $3.50 to $4.50 per week. For further information. address

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ARTICLE XLVIII.

"CEREBRATION."

BY HENRY M. LILLY, M.D., of Fond du Lac, Wis., Nov. 4th, 1868.

When we propose to use a scientific term in the discussion of a subject requiring close reasoning, it is a good thing to settle beforehand exactly what we mean by the term; and also whether the meaning we attach to the term is merely an uncertain hypothesis, or actually a proven fact. To call the function of the cerebrum "*cerebration*," and then to say that cerebration is thinking, and that thinking is just as much a product of the cerebrum as bile is of the liver, is a mode of shifting terms about, with the interpolation of an assertion or two, that leaves us no wiser than we were at the outset.

No physiologist doubts that the healthy action of the cerebrum (whatever that action may be) is an indispensable condition to the healthy action of the mind in a living man. But wherein are we enlightened, by calling this action of the hemispherical ganglion "cerebration"? Certainly there is no objection to the use of the term, if we limit its meaning so that it shall cover nothing except what we know of cerebral function. But when a writer in the August number of the MEDICAL EXAMINER tells us that "ratiocination and ideation are but the result of the moulting and regeneration of cerebral cells," he is cov-

ering by the term "cerebration" not only all that we know of cerebral function, but a good deal besides.

Physiologists believe that our optic ganglia (the tubercula quadrigemina) are in some way indispensably connected with the sensation of sight. The image of a man walking upon the sidewalk is formed upon our retina; and we know how this is done. We know, also, the simple fact that through some agency of the optic nerve this image and the optic ganglia are brought somehow into connection; but we *don't* know how this is done. We know, moreover, that through the help of our optic ganglia we obtain the *sensation* of the image upon the retina; but we are utterly ignorant as to how *this* is done. To say that the sensation of sight is but the result of the moulting and regeneration of the cells of the optic ganglia, would not bring us a single step nearer to a satisfactory solution. It is, of course, difficult to refute such assertions, because we are all equally in the dark. If we knew how our optic ganglia helped us to see, and how our cerebrum helped us to think, then all such assertions and hypotheses would be either proven true or proven false, without any farther ado. But in the present state of our knowledge they only serve to mystify still more a darkness already sufficiently mysterious.

If we seek only to find how the impressions made upon our senses are conveyed to the ganglia of the senses by the nerves, we find ourselves involved in Egyptian darkness. If we seek next to ascertain how those impressions thus transmitted to these ganglia become there converted into sensations, lo! the darkness is more than doubled upon us. Lastly, if we desire to know how with our cerebrum we take cognizance of these sensations formed by the help of the sensory ganglia, it is as if the sun and all the stars were blotted out from the heavens. Who now will believe us if we call to our fellows from this outer darkness, "Ah, we see! mind results from organization; it is made by the cerebrum just as bile is made by the liver?" If any portion of the world believes the statement, it will believe simply because it takes a notion to, and not because it sees any light ahead.

Men believe that matter and mind are in their essences two entirely different things, not because they know anything about the essence of either mind or matter, but because they perceive easily that the properties of the two are totally unlike. They see that hope, fear, and love, memory, self-consciousness and reasoning, cannot in any way be compared with the properties of a certain number of ounces of bile, nor with the properties of the electric force. Hence, they will continue to believe that mind is something besides a secretion or a force produced by matter, until they are convinced to the contrary by a satisfactory demonstration.

Every man carries with him a certain self-consciousness that his individual self is something quite different from his body, or any part of his body. He does not believe that his body and its products are all there is of him, or even constitute his personality. He looks upon his hands as not himself, but certain instruments of his. He looks upon his liver and his brain in the same way. None of us can explain this self-consciousness. None of us can prove from the study of organization whether we are, or are not, woefully deceived by it. But the fact of its existence is incontrovertible; and until this notion is knocked out of us by the stern logic of scientific demonstration, we must accept it as a probably correct notion.

Very many of the inferior animals possess a cerebrum, and exhibit more or less of mental traits differing in degree only from those exhibited by man. The cerebrum of the horse is doubtless similar in function to that of man. If the cerebrum of man is an instrument of the mind, then also the cerebrum of the horse is an instrument of mind. If memory is an attribute of mind, then a horse has a mind. If by the term mind we mean the "soul," then a horse has a "soul." Whether we study this animal anatomically or psychologically, we are led to the same conclusion. But this does not prove that mind is the result of organization. It simply transfers the argument to other grounds, and leaves the whole question "*in statu quo.*"

Because as anatomists and physiologists we have no knowledge of mind apart from a cerebrum, it follows logically that

as anatomists and physiologists we cannot trace the existence of mind beyond the death of the cerebrum. Are we, therefore, justified in drawing the conclusion that "the idea that man may retain the power of thought after the destruction of the brain is too absurd to bear the test of careful scrutiny"? This question is taken by the hand of death entirely from the domain of the physiologist as such. It becomes now simply a question of the power and purposes of the Creator. A Power sufficient to create a mind is certainly sufficient to continue its existence after the destruction of the brain, if it chooses to do so. If it can create the brute mind with the commencement of organic life, it can destroy the brute mind at the termination of organic life, if it chooses to. If it can create the mind or soul of man with the organic life of the body, it is certainly capable of either destroying it with the body, or perpetuating it after the death of the body, at its option.

If we believe in the existence of a God, then we believe in the existence of a mind, concerning which it would be a logical absurdity to say that it was itself only the product of organization. But if the mental attributes of the Deity can exist without a cerebrum, then it follows that the mental attributes of man are not necessarily, nor even probably, the products of his cerebrum.

On the other hand, if "ideation and ratiocination are but the results of the moulting and regeneration of cerebral cells,"—if thought is but the bursting of a cerebral cell,—if, in short, *mind* is only the result of organization, *then* it follows that there is no God in the universe. Everything in the universe, with all the beautiful and transcendently perfect adaptations that we see in Nature, are the result of *what?*—shall we say "of organization?" But whence came the organization? No man can deny or disbelieve that the organization, for example, of the cerebrum and all other portions of the body of man display *intelligence*,—display intelligent *forethought* and wisdom. Then intelligence is *antecedent* to organization, and is not necessarily a product of it. But if intelligence is antecedent to organization in *any* known case, by what authority do we claim it to be

the product of organization in some other case? Our logic becomes at once as philosophical as the performance of a playful dog, running around in an animated pursuit of the end of his tail. The horse does not pull the cart, but the cart propels the horse;—that's the way the whole concern comes to *move along*, —says our philosopher. But if you ask him how the cart comes to push the horse, he says,—Oh, that is the result of organization. Now, if you ask him how the organization came to be so well adapted to move the cart that pushes the horse, he replies by asking you to explain to him something else which you don't understand. Now, how much wiser, or better, or more probably truthful, is this theory than that of the little child who will tell you that God made the horse and the horse pulls the cart, and that is all that he knows about it? The logical result of all this absurd theory of cerebration is, that there is no God at all in the universe,—that our personal identity is nothing but a product of our cerebrum, so far as we know anything about it,—that there is no mind in us except what results from "cerebration," just as there is no milk possible except what results from lactation. If these be the "look-out mountains" of science upon which we are invited to "plant our feet firmly," verily, our battles on the subject will not be fought a great way above the clouds. The theory of "unconscious cerebration" is certainly not a "*startling* theory." What is there "startling" in the theory that our cerebrum may perform its functions without our being conscious of the action? Are we *ever* conscious of the action either of the cerebrum or of the liver? That the *mind* may act unconsciously, is a curious and interesting fact, and one worthy of investigation.

Our writer on "Unconscious Cerebration" is entitled to our thanks for the very interesting facts he brings forward on this subject. But this unconscious action of the mind does not prove that "mind-force is correlative nerve-force," nor that mind is a product of the cerebrum. If the mind *can* act, and *does* act, unconsciously,—as we admit,—and if, in the living man, the functional activity of the cerebrum is an indispensa-

ble condition of mental action, as we all admit, then it follows necessarily that "*cerebration*" may take place unconsciously. But whatever may be said either in affirmation or negation upon this question of unconscious action does not in the least affect the question as to what cerebration is. The question of unconsciousness does not affect the question of the nature of the action itself. After we have said all that we wish upon the former question, the latter will still roll back upon us with neither more nor less of its pristine force.

ARTICLE XLIX.

THE CURABILITY OF HYSTERIA.

By R. L. WALSTON, M.D., Paris, Ill.

The teaching of the advance of the medical profession upon the subject of hysteria is, that it is a manifestation, through the nervous system, of structural lesions, of physical changes, of absolute local disease, amenable to treatment and to cure. My little experience corroborates, yea, demonstrates, the correctness of the above teaching. And, for the purpose of illustrating, I hereby report in brief what I consider a typical case.

In May, 1867, while treating a surgical case of great interest, my attention was called to a woman doing kitchen service in the house of my patient. There were present all the symptoms of this protean malady, and not the least trifling of which was the enormous distention of the bladder. Extract of valerian, morphia, and the catheter disposed of the case, and I saw little else of it till in June, 1868. The patient was proverbially hysterical, and had been treated by all the physicians in this place, and some from abroad; but I believe all (myself among the rest) had aimed at palliation only. This time I determined to ascertain, and, if possible, remove the cause of my patient's suffering.

A careful examination revealed hyperæsthesia of all the pel-

vic organs, with some traces of cystitis and cervitis. I had almost neglected to state, that this patient had suffered for eight years with distressing dysmenorrhœa, and for two years just past had been menstruating vicariously, the stomach having taken on the office of the uterus. Some of her answers led me to suspect disease of the bladder, produced by physical cause; and, upon sounding the bladder, I discovered a calculus, which was speedily removed.

The stone was of a pale-yellow color, ovoid in shape, flinty in texture, with calcareous concretions upon it sufficient to cover about half of the surface, serving to make it rough, and capable of a vast amount of irritation; and had evidently been introduced through the urethra by the patient herself, some ten years or more ago.

I now have the pleasure to report her *perfectly* well, cured of her hysteria (?), and menstruating regularly and naturally.

REMARKS.—This case is valuable only so far as it serves to impress upon the minds of the profession that hysterical manifestation is the result of local causes, which can usually be found about the uterine organs; and so long as caustics, properly applied, will cure those chronic inflammations, and spongetents, knives, and écrasseurs remove polypi, fibrous and fibroid tumors, I, for one, shall use them, to the joy and satisfaction of myself, and the cure of my patients.

ARTICLE L.

A SHORT PAPER ON THE NATURE OF INEBRIATION, AND THE MEANS OF CURE.

BY N. S. DAVIS, M.D., etc., Chicago, Ill.

[Prepared for the Western Association for the Advancement of Social Science, November 10th, 1868.]

There are no questions connected with the social interests of the human family more important than those which relate to the influence of intoxicating drinks. Whether we consider the vast pecuniary expenditure occasioned by their use; the im-

poverishment it helps to perpetuate among all classes; and the indirect effects upon the sanitary condition of individuals and communities; or whether we study their more direct influence over the moral, social, and physical condition of the consumer, we shall be overwhelmed with the magnitude of the subject, and astonished at the tenacity with which popular errors are perpetuated from generation to generation.

It is no part of our present purpose, however, to enter upon so broad a field of inquiry. But simply to offer a few suggestions in relation to the nature of *inebriation*, and the means that may be made available for its cure. For whatever differences of opinion may be entertained in regard to the propriety or impropriety of using intoxicating drinks, there is no escape from the fact, that such use tends so strongly to establish an appetite for more, that the number of inebriates among all classes of society is so great as to demand the serious attention of every good citizen.

It might appear to some superfluous to enter upon a serious inquiry into the *nature* of so familiar a condition as alcoholic inebriation. And yet we doubt whether there is any subject relating to the social interests of man, concerning which more mischievous errors exist in the popular mind. Perhaps four-fifths of the people at the present time regard inebriation or drunkenness simply as a vice, a crime, or moral delinquency, arising from the abuse of those fermented and distilled drinks which, properly used, are tonic, nutritive, and life-sustaining.

Hence, few things are more common, than to see a man or woman sipping wine, and at the same time expatiating upon the moral delinquency and social degradation of some neighbor, who, by long continuance of the same process, has become an habitual drunkard.

But is inebriation really a crime or a disease? Is it a state of moral turpitude, or a morbid condition of the physical organization, induced by the action of a material agent brought in contact with such organization through the blood? It may be a crime to drink an intoxicating draught for the purpose of inducing inebriation, or with a full knowledge that such will be

the result; in the same sense, that it is a crime to deliberately expose ourselves to such atmospheric changes as will very certainly cause an attack of rheumatism or pneumonia, or otherwise impair our health and usefulness.

But that the appetite for alcoholic drinks and the state of inebriation are diseased conditions of certain organs or structures, is susceptible of clearest demonstration. To procure a full recognition of this fact by the community at large, is a step of paramount importance in preparing the way for the adoption of such measures as will either prevent or cure the disease. We cannot accomplish this object, however, without first establishing a correct knowledge of the nature and effects of alcohol, as the active ingredient in all the intoxicating drinks in common use, whether fermented or distilled. It is probable that a very large majority of the people, even at the present time, regard alcoholic drinks, when used with moderation, as tonic, nourishing, warming, and life-sustaining. To use the language of another, they are regarded as the "conservators of strength in manhood and as the milk of age." These popular notions are strengthened, on the one hand, by the direct exhilarating effect of alcohol on the nervous system, and on the other by certain theoretical dogmas promulgated by Liebig, Johnston, Hammond, and others, who have boldly proclaimed alcohol to be either respiratory or accessory food. This class of chemico-pathologists simply point to the fact that alcohol, in its chemical relations, belongs to the class of Hydrocarbons; and that these substances, out of the living body, are capable of undergoing combustion by uniting with an additional proportion of oxygen; and straightway jump to the conclusion that, when taken into the system, they actually enter into such combination with oxygen, and hence become respiratory food. And yet, we search all their writings in vain for the first item of proof that their mere theoretical deduction is correct.

A more recent modification of the theories emanating from this school of writers, makes alcohol, not respiratory, but *accessory food.* It having been clearly proved, by the experiments of Boker and others, that the presence of alcohol in the

system lessened the atomic changes and secretions in such a way as to diminish the loss of weight, by diminishing the sum-total of eliminations in a given time, it was at once assumed that this diminution of atomic changes in the tissues of the body, was equivalent to just so much nutrition or addition of new matter through digestion and assimilation; and hence the alcohol was declared to be accessory or indirect food; a fallacy that will be exposed in another place.

We have thus stated fairly the theoretical doctrines of this class of men, because their names are continually quoted as authority throughout all departments of our literature.

Let us now see how these theoretical assumptions and popular notions are sustained by a wide range of experiments and carefully-observed facts.

First. Numerous chemical analyses of the blood and different tissues, made by different experimenters, show that when alcoholic drinks are taken, the alcohol enters the blood and permeates with it every part of the body.

This position is now acknowledged to be correct by all classes of observers.

Second. An equally reliable series of experiments have shown that the alcohol undergoes no chemical change in the system, but is eliminated through the excretory organs, more especially the lungs and kidneys, within a few hours after it is taken.

This position has long been disputed, but it was finally fully established by the results of the, well-devised and carefully-executed, experiments of Lallemand, Perrin, and Duroy.

Third. While in the blood and circulating through the system, the alcohol diminishes the sensibility of the brain and nervous system in the same manner as other anæsthetics, and also retards the active changes in all the tissues; and consequently diminishes the sum-total of eliminations or excretions in a given period of time.

The numerous and patient experimental investigations of Prout, Sandras, and Boucherdet, Boker, Hammond, and others, have removed all doubts in regard to the truth of this proposition.

Fourth. By diminishing the atomic changes in the tissues of the body and the sensibility of the nervous system, the alcohol by its presence also diminishes the temperature, the strength, and the power of endurance. That its presence in the system reduces the temperature, was first fully established by the results of a series of experiments performed by myself in 1850, some of which I repeated in 1867. These experiments consisted in testing the actual temperature of the body every half hour, with a delicately-graduated thermometer, for three hours after a moderate drink of alcoholic liquor. The tests were applied to both wine and whiskey.

These results are confirmed by the observations of Magnus and others in Europe. That the presence of alcohol directly diminishes the strength and power of endurance, is proved, not only by the foregoing scientific investigations, but also by a large number of carefully-observed facts in relation to the results of Labor, in civil and military life, and by the statistics of sickness and mortality.

Twelve or fifteen years ago an article was published in the *British and Foreign Medico-Chirurgical Review*, embracing a large amount of statistical information on this subject. At one place in England where a large amount of brick-making is carried on, and where the amount of each man's work, the number of days lost by sickness or otherwise, and the deaths, were made matters of record, the rules of the service allowed to every man a mug of beer at each meal.

But there were among the workmen quite a number who wholly abstained from the use of the beer, or any other intoxicating drink.

An examination of the record showed that the average amount of work done, per annum, by the beer-drinkers was a large percentage less than that done by those who wholly abstained, while the number of days lost by sickness was greater. The same relative results have been shown in reference to every other species of manual labor where records have been kept sufficient to afford a comparison. The article to which we have just alluded contained some interesting items from the reports

of the Registrar-General of the British Army. At that time the soldiers of the army in the East Indies were allowed regular daily rations of whiskey; but there were some companies of pledged teetotalers, who faithfully declined the ration. On examining the details of the regular reports concerning sickness and mortality in that army, it was found that the ratio of sickness and mortality among the teetotalers was from five to ten per cent. less than for the rest of the army.

The history of our own army affords some facts of importance on this subject. Dr. Mann, a surgeon of excellent authority, who served with the army of the Revolution, says:— "At that period, during the Revolutionary War, when the army received no pay for their services, and possessed not the means to procure *spirits, it was healthy.* The 4th Massachusetts Regiment, at that eventful period of which I was surgeon, lost in three years, by *sickness*, not more than five or six men. It was a time when the army was destitute of money. During the winter of 1779–'80, there was only one occurrence of fever in the regiment, and that was a pneumonia of a mild form. It was observable in the last war, from December, 1814, to April, 1815, the soldiers at Plattsburg were not attacked with fevers as they had been the preceding winters. The troops during this period were not paid; a fortunate circumstance to the army, arising from the want of funds."

These may be said to be only negative results, but unhappily the history of the recent war for the suppression of rebellion furnishes some examples of a positive character. While General Cass was Secretary of War, several years since, the whiskey rations were discontinued in the United States Army, and coffee and sugar substituted. This has been the army regulation ever since. The Army of the Potomac, in the spring of 1862, was subjected to great hardships in labor, and exposed to the extremely wet and malarious region of the Chickahominy. There was consequently much sickness and suffering. Under these circumstances, the Commanding General issued an order on the 19th of May, allowing every officer and soldier one gill of whiskey per day; half to be served in the morning and half in the evening.

But the results were so manifestly injurious to the sanitary condition of the army, that in just thirty days the order was fully countermanded by the same General. Concerning this experiment in the Army of the Potomac, Dr. Frank H. Hamilton, one of the most eminent surgeons serving with that army, says:—"It is earnestly desired that no such experiment will ever be repeated in the armies of the United States. In our own mind, the conviction is established by the experience and observation of a life, that the regular routine employment of alcoholic stimulants by man in health is never, under any circumstances, useful. We make no exceptions in favor of cold, or heat, or rain, nor, indeed, in favor of old drinkers, when we consider them as soldiers."

For these and other facts bearing on this subject, see Dr. Hamilton's valuable work on Military Surgery, from page 70 to 75. Further facts of a striking and perfectly authentic character, bearing on this subject, may be found in one of the volumes of "Medical Inquiries and Observations, by Benjamin Rush, M.D.," in the chapter devoted to a comparison of the diseases prevalent in Philadelphia during ten years previous to the Revolutionary War, with those of a similar period after the close of that war. Indeed, it were easy to fill a volume with facts and statistics showing that in every relation of human life, the use of alcoholic drinks diminishes man's capacity to endure both mental and physical labor; increases his predisposition to disease; and shortens the average duration of life. And, although we have had our attention directed to this subject for thirty years, we have not found, either in the records of medicine or of general literature, a single statistical item calculated to prove the contrary. We have seen an abundance of *opinions* expressed of an adverse character. But *opinions* are not facts.

It is very common to hear that some sick or injured person has been kept up, or "kept alive," on brandy, or whiskey, or wine, for several weeks. But do those who make the assertion have any reliable means of knowing whether the sick person was actually kept alive by the alcoholic potion, or whether he

lived in spite of it? The eminent Dr. Todd testified strongly to the sustaining and beneficial influence of alcoholic drinks in the low forms of fever, yet statistics show that in the London fever hospitals with which he was connected, the ratio of mortality increased *pari passu* with the increased use of alcoholic drinks as remedies. The able corps of medical attendants on the Bellevue and Emigrant Hospitals in New York also bore decided testimony to the utility of these liquors in the treatment of the same forms of fever, and used them largely. But the mortality was one in every five or six cases treated. The same fevers placed in tents with plenty of fresh air, and nourishment without a drop of alcoholic drinks in their treatment, gave a mortality of only one in seventeen.

The statistics of almost all epidemics show that those addicted to the use of intoxicating drinks are much more liable to be attacked than those who abstain; and of those who are attacked, a larger proportion die. If alcohol takes no part in nutrition, but passes through the blood disturbing the nervous sensibility and retarding the organic changes, some may be ready to ask why habitual drinkers of wine and beer grow fat and increase much in weight. We answer, that the presence of alcohol in the blood not only retards atomic changes in the tissues, but it diminishes the amount of oxygen taken in through the lungs. Consequently, the carbonaceous elements of the blood and tissues do not become oxidated as rapidly as when the alcohol is not present, and they accumulate in the form of *fat.* And this process is sometimes carried so far that the heart, liver, and kidneys undergo more or less fatty degeneration, constituting incurable forms of disease.

The increase of bulk and weight in these cases is not from an increase of natural nutrition, but a slow accumulation of hydro-carbonaceous material from retarded metamorphosis. The individual fattened under such influences, invariably diminishes in physical activity and power of endurance, in proportion to the increase of weight. Those who imagine that to diminish the waste of the tissues by diminishing the atomic changes, is equivalent to the actual assimilation and addition

of new atoms, forget that all the phenomena of life in the physical organization, are the direct result of such atomic changes; and that whatever diminishes these actually diminishes physical life, and to stop them is to stop life.

If the reverse were true, we should only need enough of alcohol, or some other agent, to stop the changes in our tissues altogether, and we would live on indefinitely, without the trouble or expense of eating.

The simple logical deduction from all the carefully-observed facts, in relation to this subject, is, that alcoholic drinks, when taken into the human system, circulate in the blood as foreign agents; and until eliminated or cast out through the excretory organs, produce a temporary exhilaration of the mental faculties, accompanied by diminished sensibility, temperature, strength, and atomic changes. And when these effects are often induced, they result in a more or less permanent morbid or diseased condition of the organic actions, and especially of that portion of the nervous system connecting the stomach with the brain, constituting a morbid appetite or craving, which, in its demands for the accustomed exhilarant, often overpowers the most capacious and cultivated intellect and the most sacred pledges.

These deductions have a most important bearing on the question of how ought we to treat the inebriate? If the inebriate is the victim of a positive disease, induced by the action of an alluring and deceptive physical agent, alcohol, will any number of moral lessons addressed to his intellect, or any amount of denunciation hurled at his degradation and his vices, cure or reform him? Or, will his arrest, arraignment in a police court, and extortion of the few dollars he has left as a fine, eradicate the disease that is preying upon the most delicate part of his organization? Abundant experience throughout the civilized world answers these questions in the negative. The treatment demanded by the nature of inebriation, and the interests of humanity, is the same in kind as that awarded to the sick and the insane.

Instead of denunciations, fines, and imprisonments, the ine-

briate should be sent directly to an asylum, where he should receive thorough instruction in regard to the actual effects of alcoholic drinks on his physical as well as mental condition, in connection with such diet, medication, and employment, as a specially qualified superintendent should deem adapted to his case. The establishment of Washingtonian Homes and Inebriate Asylums in Boston, Chicago, Binghamton, New York, and a few other places, is only the initiatory step in this great work. These institutions are adapted to the reception and treatment of such inebriates as voluntarily resort to them. But to reach the great mass of those suffering from the disease of inebriation, requires a thorough change in our jurisprudence.

The law must recognize the important fact that inebriation is temporary insanity, caused by the morbid effect of a physical agent on the brain and nervous system. Instead of arrests, petty fines, and temporary imprisonments in police stations, Bridewell, etc., ending only in a further demoralization and speedy return to the dram-shop, the law must provide well-appointed asylums, in which the victims of alcoholic disease can be legally placed, until, by the combined influence of correct instruction, abstinence, productive labor, and proper medication, the disease and morbid appetite are effectually removed. Such a change in the management of drunkenness would speedily work other changes of vital importance to society.

Alcoholic drinks, becoming directly associated with the idea of disease and mental alienation, in the public mind, would speedily come to be universally regarded in their true light as debilitating to body and mind, instead of tonic and life-sustaining. This would necessarily be accompanied by a corresponding change in the language of the physician at the family fireside, and in the phraseology adopted in the press and the current literature of the day. Such a change would do more to discourage dram-drinking, and all its direful consequences, than all other measures combined. We hope, therefore, that the members of this Association will give to this subject all that thought and patient investigation which its importance demands.

Proceedings of Societies.

CHICAGO MEDICAL SOCIETY.

Friday Evening, Nov. 6, 1868.

The meeting was called to order, Dr. Marguerat, President, in the chair.

Dr. McDonald, Secretary, being absent, Dr. Wanzer was chosen *pro tem.*

The name of Dr. Foster, who was recommended for membership at last meeting, had not been acted upon by the Committee, and was deferred.

Dr. E. L. Holmes presented a crystalline lens from the eye of a young man aged 22 years, which dropped into the anterior chamber of the eye while the patient was stooping over to pick up something. The same accident happened to the other eye some two years ago, when the physician in attendance attempted to replace the lens to its natural position by pressure, which resulted in the evacuation of the humors of the eye and collapse. For the past year the patient had suffered considerable pain in the good eye, up to the time of the accident which occurred about one month ago, Dr. Holmes removing the lens on the following day. The patient was always near-sighted, and while the lens occupied the anterior chamber he could still see to read fine diamond print at a short distance. The wound healed one week after the operation, and, to the great delight of the patient, good sight was restored. The Doctor remarked that one week ago there appeared a small hernia near the iris, which he punctured. The eye is still at rest, but doing well.

Dr. H. remarked that the dislocation of the lens was of rare occurrence, and thinks it is due in the present case to congenital malformation, as the patient is a singular-looking fellow, being loose-jointed, especially the hands and wrists, presenting the appearance of one who has had the rickets.

Dr. Holmes also presented a *choroidal tumor*, carcinomatous in character, on the internal portion of the right eye.

Dr. J. P. Ross exhibited a cirrhosed liver taken from a woman who died in the County Hospital, of typhoid fever. This liver was compared to a healthy one; the latter weighing 3 lbs., 12 oz., while the diseased one weighed only 1 lb., 12 oz. The patient was of intemperate habits.

Dr. Ross also presented the lungs of a young man of about 18 years, who died in hospital, of phthisis pulmonalis. Six weeks previous to his entering the hospital he said that he was perfectly well. He died two weeks after entry. The right lung showed quite a cavity in the upper lobe, which was the seat of cavernous respiration during life; the remainder of the lung, as well as the left lung, being thickly studded with tubercle throughout its entire substance.

On admission to hospital, the patient was suffering from cough, night-sweats, hectic, and constant diarrhœa, which continued until death. All other organs seemed in a healthy condition, with the exception of the mesenteric glands, which were slightly enlarged.

The Society then proceeded to the discussion of the subject chosen at the last meeting, *viz.:* "The Therapeutical Value of Carbolic Acid."

The discussion was opened by Dr. Bogue, who gave a brief history of its discovery, etc. Stated that its therapeutical value was lately brought to notice by Dr. Lester, of Edinburgh, who had applied it quite extensively to severe wounds, and in many cases of compound fractures, virtually converting them into simple ones by diminishing, or rather preventing, suppuration. Dr. B. remarked that he had not had any experience in its use in compound fractures.

Stated that the general modes of application were in solution, and in the form of a paste mixed up with whiting. The solution being from 3 to 6 parts of the acid to 20 of water, or linseed or olive oil; which solution, in case of amputation, is to be smeared over the entire flaps before closing; after which, the paste should be applied so as to entirely exclude the air from the wound. Tinfoil has been used for this purpose.

Cases have been reported where no suppuration has occurred

under the treatment recommended. Remarked that it had been used in catarrh and ozena, when the discharges were offensive; also as a local application to the mouth and throat, in the strength of from 1 to 3 grs. to the ounce of water or glycerine. Had prescribed it in one case of diarrhœa, characterized by offensive discharges, in $\frac{1}{16}$-gr. doses internally, but without benefit. Stated that the remedy in foul ulcers, etc., was highly spoken of, but that his experience with it had been rather unfavorable; that he had used it in one case of gangrene, and considered it far inferior as an antiseptic to permanganate of potassa, although in this case it might have been owing to the solution being too weak. In cases where there are sinuses or suppurating cavities, the use of 1 part of the crystals to 40 parts of water have been attended with marked benefit.

Dr. B. thinks that it is most applicable and beneficial in lacerated wounds and amputations. Has used it in gonorrhœa and gleet, in solutions of different strength (1 part c. acid to 6 of oil, and 1 part c. acid to 30 of oil), with poor effect. Also used it 1 part acid to 2 of glycerine, on chancres, with very good effect.

Dr. Fisher remarked that he had not had much experience in its use, but that he had used it in one case of compound fracture of the tibia, in the form of paste made with chalk, where there was but little suppuration, and good result; also with benefit in ulcers.

Dr. Ross remarked that he supposed it was purely a surgical remedy, but that he was tempted to use it in one case of chronic dysentery, where the patient was very low.

He gave in this case—

℞. Cupri Sulphas, ---------- gr. $\frac{1}{4}$.
Pulv. Opii, ---------- gr. j.

alternated with the turpentine emulsion, with injections of a weak solution of carbolic acid, with ʒss. tincture opium. The patient always inquired after the injections, and in two weeks had entirely recovered.

Dr. Quails remarked that he had used it in a case of phlegmonous erysipelas, suppuration stopping on the second day.

Also ten cases of gonorrhœa, 6 acute, 4 chronic, with injections, carbolic acid 1 part, glycerine 12 parts, without very good effect.

Dr. Gray reported case of diarrhœa which was treated successfully by injections, 2 gr. acid to 1℥ water, with gtt. xx. tinct. opii; also, in eczema, with good effect, applied externally.

Dr. Bridge stated that he had used it in one case of ozena, but that the discharge was more copious, although not of an offensive character.

The Society next proceeded to miscellaneous business.

Subject for discussion was then chosen.

Dr. Davis recommended that the subject for discussion two weeks hence be the following, which was duly carried, *viz.*:— "How far do Continued Fevers prevail in this city at the present time, and what are their characteristics?"

The object being to elicit the observations of all members of the Society.

On motion, Society adjourned.

Members present—Drs. Marguerat, Bogue, Davis, Holmes, Loverin, Wanzer, Quails, Avery, Blake, Fisher, Paoli, Ross, Bridge, Gray.

FRIDAY, NOV. 13, 1868.

The Society was called to order, President Marguerat in the chair.

The Secretary then read the proceedings of last meeting, which were duly approved and ordered to be placed on file.

Dr. Lyman reported a case which occurred in his practice last summer, where the patient, while getting into a carriage, made a misstep, and was suddenly seized with a severe pain in the vicinity of the trochanter. She was taken home, put to bed, and an anodyne administered. In a day or two the pain was reflected to the anterior portion of the thigh, when the Doctor applied a thimble packed half full of cotton, which was saturated with aqua ammonia. This remedy produced a blister

within four or five minutes. The cuticle was then removed, and ¼ gr. of morphia was applied to the denuded surface, and the part covered with oiled silk.

This application entirely removed the pain, and the patient was kept in a comfortable condition by resorting to the application twice a day. Small doses of quinine were administered daily, and in a week the patient was able to attend to business. Dr. L. is of the opinion that this method of administering morphia is preferable to hypodermic injection.

Dr. Bogue presented a patient with elephantiasis and chronic eczema, involving one leg from above the knee to the extremity of the toes. The leg was very hard with varicose veins, which were very tortuous. This disease was the result of injury some two years ago. The treatment consisted in an application of iodine, gr. x., glycerine ℥j., to the eczema, and injections of persulphate of iron into varicose veins. Under this treatment the patient has improved considerably.

Dr. Paoli remarked that the case did not look like true elephantiasis to him, as he had seen two cases in which the skin was very much thicker, and darker-colored.

Dr. Lyman remarked that he presumed the color and skin had changed much under treatment; also spoke of having seen two cases of elephantiasis.

Dr. Bogue stated, when the patient presented himself, the skin was much darker-colored, and corresponded to "Wilson's" diagnosis of elephantiasis.

Dr. Wanzer reported two cases:—

Case 1. *Laceration of the Perineum.*—Was called to case where a woman had been in labor twenty hours, with her first child. Found child's head impacted in inferior strait, and labor not progressing. After waiting four hours, introduced forceps. The blades of the forceps were applied in the occipito-frontal diameter of the child's head, and by gentle traction the child was delivered, rupturing the perineum, so as to form a complete opening into the rectum. Immediately gave an anodyne, placed parts in apposition, and kept them so by the application of a couple of sutures. Kept the bowels constipated by use of ten

drops tinct. opium, three times a day. Child and mother are both doing well.

Case 2. *Post Partum Hemorrhage.*—Was called in a case of a large, plethoric woman, who had been delivered of a child one hour previously, and who had suffered so severely from hemorrhage as to render her nearly pulseless. At once lowered the head of the bed, so as to produce gravitation of the blood towards the head, and administered fl. ext. ergot ℥ij. in the course of the hour, when all hemorrhage ceased.

Dr. Paoli remarked, that in case of the application of the forceps, it was necessary to support the perineum at time of making traction, and that he should employ an assistant under such circumstances.

Dr. Hatch stated that he did not believe in supporting the perineum where the forceps were used, believing the elevation of the handles all that is necessary, and all that can be done to avoid laceration of the perineum.

Dr. Paoli thinks ergot is not an effectual remedy in producing contraction of the uterus, and would not depend upon it in such serious cases as that reported by Dr. Wanzer; believing there were more reliable remedies in the materia medica.

Dr. Hatch thinks that ergot is one of the most useful articles in case of post partum hemorrhage, it acting as a styptic under such circumstances. In large doses believes it a decided narcotic, diminishing the heart's action. Says he has never failed to produce contraction of the uterus by grasping the fundus with the hand and the administration of ergot, although he has practised medicine forty years. The preparation he generally employed was the fluid extract.

Dr. Paoli says that there is no remedy which will produce contraction in the uterus in case of hemorrhage as efficiently as gallic acid, given in 10-gr. doses. Cited a case of craniotomy, followed by hemorrhage, in which he used a solution of tannin as an injection. Believed that had he depended upon ergot, the hemorrhage would have proved fatal.

Dr. Wickersham stated that gallic acid was not prompt

enough in its action, and thinks the physician who neglects the use of ergot in cases of post partum hemorrhage, neglects his very best remedy. Cited a case of hemorrhage where he employed the fluid extract without success, when he resorted to the powder with benefit.

Dr. Merriman remarked that he thought Dr. Wanzer pursued the right course in the administration of ergot, but asked the object of the sutures in the perineum?

Dr. Wanzer said that he thought the ergot had but little to do with stopping the hemorrhage, but believed it due to the lowering of her head and the application of cold water to the hypogastric region.

Dr. Merriman reported the case of a large, plethoric woman, weighing 250 lbs., who, while in labor, suddenly had the pain reflected to her head, the contractions of the uterus being entirely suspended. Waited twenty minutes, and then proceeded to give ergot. While preparing ergot, happened to turn around, and found her jaw set and in convulsions. At once anæsthetized the patient; after which he gave the ergot, and soon delivered her of a child weighing 13¾ lbs. History of patient showed she had convulsions at a previous labor.

Dr. Wickersham thinks that the forceps might have been used, as the traction would have produced contractions of the uterus.

Dr. Loverin said he did not favor the administration of anæsthethics during labor.

Dr. Hatch remarked that he never had anæsthetized a patient when using the forceps, as it was better to have the sensations of the patient to aid you in applying the instruments, thereby avoiding inclusion of any of the soft parts of the mother between the fœtus' head and the forceps.

The case reported by Dr. Merriman, was discussed by Drs. Loverin, Paoli, and Wanzer.

Society then proceeded to miscellaneous business, and Dr. A. H. Foster was unanimously elected a member of the Society.

Adjourned.

Selections.

ON SOME RESULTS OF A RETROGRADE ENGORGEMENT OF THE BLOODVESSELS.

My object in the present communication is to direct attention to certain results of a retrograde engorgement of the bloodvessels, consequent upon an impediment to the onward movement of the blood. Most of the facts to which I am about to refer are well-known and familiar facts; I believe, however, that they have not hitherto been collated and analyzed with the care and the accuracy which their pathological interest and their practical importance demand.

I have to speak first of certain phenomena which result from an impeded circulation through the *lungs*. I shall afterwards refer briefly to some analogous phenomena which follow an interrupted circulation through the *liver* and through the *kidney* respectively.

Let me first, then, direct attention to the well-known peculiarities of the blood-supply to the lungs. The lung, as a respiratory organ, as a great gas-secreting gland, is supplied by the pulmonary artery, the blood from which passes through the pulmonary capillaries and veins from the right to the left side of the heart. The lung, as an organ whose tissues have to be nourished, is supplied with blood from the aorta by the bronchial arteries, and this blood, having been distributed to all the proper tissues of the lung, is returned by the bronchial veins (one opening into the left superior intercostal, and the other into the vena azygos) into the superior cava. In the lung, therefore, there is the pulmonary circulation proper, and, in addition to this, there is the bronchial circulation, by means of which its own tissues are nourished, this bronchial circulation constituting a part of the general systemic circulation. "The bronchial arteries and veins carry blood for the nutrition of the lung, and are doubtless also the principal source of the mucous secretion found in the interior of the air-tubes."—(Quain's Anatomy, edited by Dr. Sharpey, 7th edition, p. 903.) It is generally believed, and it probably is a fact, that where these two different sets of vessels come into contact, where the bronchi and intercellular passages merge into air-cells, there is a communication between the two sets of vessels—between the pulmonary and the bronchial systems of vessels.

I have elsewhere sufficiently proved, that during the collapse stage of cholera, there exists a great impediment in the minute branches of the pulmonary artery. The result is, that those parts of the vascular system which lie in front of the smallest branches of the pulmonary artery are comparatively empty of blood, while the parts behind are distended. The whole of the systemic venous system is gorged with blood; hence the lividity of the face, and hence congestion of the bronchial veins and capillaries, which may impart to the lung a dark color and an appearance of congestion, while yet the lung, as a whole, contains very little blood, and is much reduced in weight. Even the *pulmonary* capillaries may become partially injected in consequence of an impeded return of blood through the bronchial veins. There is a communication between the two sets of vessels about the terminal bronchi, and a part of the blood carried by the bronchial arteries is returned by the pulmonary veins. An impeded return by the bronchial veins would therefore divert more bronchial blood into the pulmonary capillaries and veins.

Some pathologists have supposed that the impeded transit of blood through the lungs in the collapse stage of cholera is a result of its becoming too thick and viscid to pass through the capillaries. This view is proved erroneous by a number of facts, and amongst others by the anatomical fact that the mass of blood is arrested *before* it reaches the pulmonary capillaries, while the blood is obviously not too thick to enter the bronchial capillaries, which, although of a smaller size than the pulmonary capillaries, are as over-full as the pulmonary capillaries are empty of blood. In fact, there is usually a direct relation between the anæmia of the pulmonary capillaries and the engorgement of the bronchial; and the contraction of the minute pulmonary arteries, presenting an abrupt bar to the onward movement of the blood, is the probable cause of both phenomena. One result of the engorgement of the bronchial veins and capillaries during the collapse stage of cholera is a tendency to passive serous transudation through the mucous membrane into the bronchial tubes. The consequence is, that after prolonged collapse the minute bronchi and air-cells become more or less filled with serum; and when, during reaction, the blood again passes freely through the pulmonary artery, the respiratory changes are interfered with by the œdematous condition of the lung, and there often occurs a fatal apnœa.

Now let us compare the phenomena of cholera collapse with those of spasmodic asthma. The general appearance of a pa-

tient during a severe paroxysm of asthma is strikingly like that of one in the collapse of cholera. Dr. Hyde Salter, in his masterly treatise on asthma, says (p. 71): "If the bronchial spasm is protracted and intense, the heat of the body falls; the oxygenation of the blood is so imperfectly performed, from the sparing supply of air, that it is inadequate to the maintenance of the normal temperature; the extremities especially get cold, and blue, and shrunk; I have known the whole body deathly cold, and resist all efforts to warm it for four hours. But while the temperature is thus depressed, the perspiration produced by the violent respiratory efforts may be profuse, so that the sufferer is at the same time cold and sweating. It is this union of coldness and sweat, combined with the duskiness and pallor of the skin, that gives to the asthmatic so much the appearance of a dying man. The pulse during severe asthma is always small, and small in proportion to the intensity of the dyspnœa; it is so feeble sometimes that it can hardly be felt."

The resemblance between some of the most striking features of the asthmatic paroxysm and the collapse of cholera is obvious. What, then, is common to these two forms of collapse? Obviously not a drain of liquid from the blood, which was so long and so erroneously supposed to be the main cause of cholera collapse, but a partial arrest of the pulmonary circulation. In a paper which is to appear in the next volume of the "Medico-Chirurgical Transactions," I have shown that in cases of acute apnœa there is the same evidence of an arrest of blood in the minute branches of the pulmonary artery as exists in the case of cholera collapse. In both pathological conditions the pulmonary capillaries contain very little blood, while the right cavities of the heart and the pulmonary artery are distended, the left cavities of the heart being comparatively empty. In both asthma and cholera, the circulation is impeded by the muscular contraction of the small pulmonary arteries; and hence the symptoms of collapse in both diseases. In cholera, the contraction of the arteries is a result of the poisoned blood in the vessel; in asthma, it is a consequence of the partial apnœa occasioned by spasm of the bronchi. In cholera, there is a primary asphyxia and a secondary apnœa, consequent upon the blood-stasis; in asthma there is a primary apnœa, the result of bronchial spasm, and a secondary asphyxia. In both forms of disease the symptoms of collapse may speedily be removed for the time by measures which overcome the primary spasm: in asthma by the inhalation of chloroform, which relaxes the bronchial spasm; in cholera by the injection of a hot liquid

into the veins, which, reaching the lungs, overcomes the arterial spasm. In asthmatic apnœa we have evidence of congestion of the bronchial system of vessels in the occasional occurrence of bronchial hæmoptysis, and in the more constant occurrence of bronchial mucous expectoration, which is copious and prolonged in proportion to the intensity and duration of the previous paroxysm.

I have dwelt at some length upon the phenomena of asthma as a type of partial acute apnœa. The causes of acute anpœa are very various; but in all essentials the phenomena are alike. Whether the apnœa be the result of hanging, drowning, suffocation, inflammatory croup, diphtheria, epileptic or tetanic spasm implicating the respiratory muscles, division of the vagi nerves as in Dr. John Reid's experiments, apoplectic coma, narcotic poisoning or injury to the upper part of the spinal cord—in each and all of these cases, in proportion to the suddenness and completeness of the apnœa, the pulmonary capillaries are anæmic, while the vessels containing black blood which lead up to those capillaries, are gorged. In all these cases, too, the retrograde passive engorgement of the bronchial veins and capillaries results in a serous and mucous, and sometimes sanguineous, exudation into the bronchial tubes.

We are now in a position to understand the condition of the lungs which is found in cases of *chronic* apnœa. In acute apnœa we have seen that the lungs are anæmic, and we have explained this by the stop-cock action of the minute pulmonary arteries consequent upon the suspension of the respiratory changes. When death occurs after a state of partial apnœa has continued for many hours, or for several days, the lungs are always found more or less gorged with blood and serum. The explanation of this is simple. The apnœal blood-stasis in the pulmonary artery throws back the blood upon the bronchial veins and capillaries, from which there is poured a serous dropsical exudation into the bronchial tubes. This fluid, sometimes blood-tinged, reaches the extremities of the bronchial tubes and the air-cells, where it compresses the network of pulmonary capillaries, and impedes the flow of blood through them. Thus the lung becomes more and more gorged with blood and serum. An analogous phenomenon may often be witnessed in anasarcous legs. The accumulation of liquid in the areolar tissue sometimes compresses the vessels so as to cause passive congestion, and not unfrequently inflammation and gangrene, of the skin and tissues beneath the skin.

A case of tricuspid regurgitation, which occurred under my

care in the hospital 12 years ago, affords an instructive illustration of the effect of an impediment originating in the right side of the heart, first upon the bronchial, and secondly upon the pulmonary, circulation. I gave the particulars of this case in a clinical lecture which was published in the *Medical Times and Gazette* of February 13th, 1858. A woman, aged 52, was admitted with general dropsy, albuminuria, a systolic bellows-sound at the bottom of the sternum, distended and pulsating jugulars, and the physical signs of bronchitis. A single large dose of elaterium acting very freely upon the bowels cleared away the dropsy, the albuminuria, and the bronchial secretion. After a short time, however, *all* the symptoms returned, and she died. We found, as we had expected, great dilation of the tricuspid orifice, while the valves on the left side of the heart were normal. The lungs were much engorged. In this case it is clear that the primary cause of all the suffering was incompetence of the tricuspid valve. There was, consequently, a reflux of blood into the systemic veins; renal congestion and albuminuria, anasarca, bronchial congestion and exudation, and then a secondary obstruction of the pulmonary capillaries. It is interesting to note that before her admission she had spit some blood, the source of which was in all probability the over-gorged bronchial capillaries. We are familiar enough with the occurrence of hæmoptysis as a consequence of mitral or aortic valve disease; the source of such hæmoptysis being the pulmonary capillaries, while disease on the right side of the heart throws back the strain and pressure primarily upon the bronchial vessels. If there were no bronchial vessels, if the sole blood-supply to the lungs were through the pulmonary artery, the tendency of obstruction at the right side of the heart would obviously be to render the lungs anæmic, and not to overfill them with blood.

Another interesting phenomenon, allied to those to which I have already referred, is the œdema of the sound lung, which not unfrequently occurs when one lung has been suddenly consolidated by pneumonia, or compressed by a pleuritic effusion. In such a case we sometimes hear crepitating sounds in the bronchi of the healthy lung; and we look upon this condition of things with anxiety, because we know that an increase of the œdematous effusion into the bronchi may cause fatal apnœa. Until quite recently I have always considered that the pulmonary capillaries were the source of the serous exudation in these cases. I have now no doubt that it is from the bronchial capillaries mainly that the liquid escapes. In consequence of

the impervious condition of the lung on the diseased side there is a state of partial apnœa; more blood is sent to the sound lung than can readily be aërated; its progress is checked and regulated by the stop-cock action of the minute pulmonary arteries; there is more or less engorgement of the right cavities of the heart and the systemic veins; and with this there is bronchial congestion, and a consequent serous exudation into the bronchi.

Once more, it is notorious that patients who have general vesicular emphysema of the lungs are very liable to bronchial catarrh. Why is this? In an emphysematous lung there is dilation of air-cells, rupture of their walls, and obliteration of capillaries. The vascular network of the lungs is much diminished; there is consequently an impeded pulmonary circulation, fulness of the right side of the heart and systemic veins, bronchial capillary congestion, and so a liability to catarrh and bronchitis. This passive congestion of the bronchial mucous membrane predisposes to catarrh and bronchitis, just as varicose veins in the leg predispose to inflammation of the integuments. Another result of the passive congestion of the bronchial capillaries which is a consequence of emphysema, is the occasional occurrence of bronchial hæmoptysis. Of this I have seen a considerable number of instances, and not a few in which the occurrence of blood-spitting has led to an erroneous diagnosis of tubercular disease of the lung.

The *liver* resembles the lung in this respect, that, as an excretory organ, it is supplied with venous blood. Like the lung, too, it receives a separate supply of arterial blood, through the hepatic artery, for the nutrition of its own tissues. It differs from the lung in this important particular, that the blood retains its black and venous character as it emerges from the liver. There is therefore no need for a companion vein to the hepatic artery corresponding with the bronchial veins; but the blood from the hepatic artery, after supplying the liver tissues, mingles with the portal blood, and so passes on into the vena cava. In cases of cirrhosis of the liver there is an impeded circulation through the gland: the whole of the portal venous system is consequently engorged; the hemorrhoidal veins are often enlarged; there is sometimes hemorrhage from the mucous membrane of the alimentary canal, and still more frequently a serous dropsical effusion into the cavity of the peritoneum.

The *kidney* differs from both the lung and the liver in this respect, that it has but one source of blood-supply. The blood of the renal artery serves at once to nourish the gland and to

supply the materials for its secretion. With respect, however, to the distribution of blood within its substance, the kidney presents some points of analogy with the lung on the one hand, and with the liver on the other. It resembles the lung in the fact that it has two sets of capillary vessels—the Malpighian capillaries and the intertubular capillaries; but it differs from the lung in the fact that the same blood passes in succession through both sets of capillaries. Then there are some points of analogy between the capillary arrangement within the kidney and that within the liver. Mr. Bowman, in his original paper "On the Structure of the Malpighian Bodies of the Kidney," pointed out that each efferent vein may be looked upon as a portal vein in miniature, the resemblance between the portal and the efferent vein consisting in the fact that each vein intervenes between two sets of capillary vessels. And thus we find that as an impediment to the circulation through the liver causes a serous exudation into the cavity of the peritoneum, from the capillary vessels in which the portal vein takes its rise, so an impeded circulation through the kidney causes a serous exudation from the capillary vessels in which these miniature portal veins—the efferent veins—originate, and this serous exudation from the Malpighian capillaries passes into the uriniferous tubes. Dr. George Robinson, Frerichs, and others have shown that a ligature on the renal vein of a rabbit causes a retrograde engorgement of the Malpighian capillaries, and a consequent escape of blood constituents into the uriniferous tubes, which, mingling with the urine, render it albuminous. In cases of Bright's disease there is an impeded circulation through the intertubular capillaries, which is, in part at least, occasioned by the pressure of the swollen tubes upon the vessels which lie between them; there is, consequently, an engorgement of the Malpighian capillaries, a serous exudation into the uriniferous tubes, and thus an albuminous condition of the urine.

We see, then, that while an impeded circulation through the lungs throws back the blood upon the bronchial veins and capillaries, and causes a serous, mucous, or sanguineous exudation into the bronchial tubes, an impeded circulation through the liver distends the portal veins and capillaries, and causes hemorrhage from the mucous membrane of the alimentary canal, or serous effusion into the cavity of the peritoneum; and, lastly, an impeded circulation through the kidney distends the Malpighian capillaries, and causes a serous exudation, and sometimes hemorrhage, into the uriniferous tubes. The results in each case are readily explained by a reference to the peculiari-

ties of the circulation in each of these important organs—the lung, the liver, and the kidney. Without such a reference the facts are utterly unintelligible.

If there be any one who doubts whether the retrograde action of a block to the circulation can be so far-reaching as I have described it to be, he has only to be reminded of the undoubted fact, that an obstructive valvular disease, on the left side of the heart, may affect the most remote parts of the circulatory system. Thus the impediment resulting from a defective mitral valve may extend backwards through the pulmonary capillaries to the systemic veins and capillaries, causing anasarca of the feet, etc.; it may extend through the capillaries within the liver to the portal vein and its capillary origin, causing ascites; and through the intertubular renal capillaries, to the Malpighian capillaries, causing albuminuria. It is manifest that neither extreme distance from the seat of obstruction, nor the intervention of two successive sets of capillaries, will prevent that retrograde passive engorgement of vessels, which results from a block in the course of the circulating current.

In a future communication I shall endeavor to show that a careful study of the hydraulics of the circulation will lead us to the establishment of some simple, yet most useful, guiding principles for the employment of bloodletting, general and local, and for the use of hot and cold applications and counter-irritants in the treatment of inflammation.—*Lancet.*

CASE OF GLANDERS IN THE HUMAN SUBJECT.

By W. O. BALDWIN, M.D., Montgomery, Alabama.

[Read before the Montgomery Medical and Surgical Society.]

On the evening of the 11th of May last, I received a message from Drs. Tompkins, Townsend, and Roberts, requesting me to visit, in consultation with them, Mr. Eli Townsend, a highly respectable citizen, living at China Grove, Pike County —distant about 38 miles, whom they supposed to have glanders. I went, and on reaching the place late in the afternoon of the 12th, I met the physicians named above, from whom, together with the family, I received the following history of the case, of which I made a record before leaving the house, and in the presence of the physicians:—

Mr. Townsend is a planter, in easy circumstances, now about 71 years of age; of large and once powerful frame; of active

and industrious habits; has always enjoyed excellent health, and up to the commencement of this attack was in remarkable preservation for one of his years. He has had on his premises a very fine saddle-horse, affected with glanders since Christmas last. This horse he has kept in a close stable on his premises, but apart from the balance of his stock, and has persisted in tending him himself, in spite of the remonstrances of his family. About the 27th of April he received a small abrasion on the dorsum of the left hand. He continued, however, to nurse his horse, and among other duties which he performed for him was that of daily syringing his nostrils with vinegar and water. The injected fluid, on its return, was of course mingled with the secretions from the nose of the animal, which were said to be very abundant, and it is quite likely that more or less of these offensive matters came in contact with the abraded surface on the hand during some of these operations with the syringe. He seemed to have some apprehension in exposing his hands in this way after the skin had become broken, and though he continued to use the syringe daily, he never failed to go immediately to the house, where, after giving his hands a thorough washing with soap and water, he would apply a small bit of paper saturated with spirits of turpentine over the abraded surface, as a preventive of bad consequences.

On the night of the 4th ult., about seven days after the abrasure on the hand, he felt a very slight uneasiness about the spot. On the next day (5th) he visited a relation in the neighborhood, where he spent the day, and whilst there observed that the uneasiness in wound on hand had increased, and noticed red streaks running up the arm, with some pain in axilla of corresponding side. Complained, also, of great oppression and distention about stomach, and when the dinner hour arrived could not eat. Had no absolute pain in stomach, but, from the general distress in that region, said he thought he must have colic. Returned home in afternoon, and had rigors and flushes of heat, succeeded by fever. At night took a large dose of calomel.

On the 6th calomel operated several times, but distress about the stomach still continued, accompanied with nausea. Hand and whole arm considerably swollen; some spots on skin hard to the touch, and as "red as red flannel" on both arm and forearm. Had alternate rigors and fever, with great restlessness. Took several small doses of calomel.

On the 7th all the symptoms increased in violence. Took a dose of Cooke's pills. On the 8th, whilst applying a poultice

to the affected arm, the nurse noticed that one of the hardest tumors on the forearm was discharging a thin serous fluid, and that underneath the cuticle where it had been broken the tissues presented a very dark, blackened appearance.

Up to this time he had not been visited by a physician. On the 9th he was seen by Dr. Tompkins, a highly intelligent physician of the neighborhood, who immediately diagnosed his condition as that rare disease in the human subject, known as glanders, which is sometimes communicated to man by the horse, ass, or mule. Pulse full and regular, and about 90 per minute; skin hot and dry; tongue heavily loaded, and moist; general feeling of uneasiness, distress, and restlessness, with pains and soreness in extremities; thirst and nausea, but no vomiting or retching; rigors occasionally, and a desire to get out of bed and sit by the fire, which he sometimes did. Arm and forearm much swollen, with a general erysipelatous look; pustules, tubercles, and bullæ with hardened bases interspersed on different portions of limb, of varying sizes and shapes and in various stages of development, one of which had broken and was discharging a thin sanious fluid, and revealing under the cuticle a blackish, sphacelated mass. Original wound where the skin had been abraded on back of hand, and which had been the point of inoculation, and now about the size of a twenty-five cent piece, somewhat sunken, of a dark leaden color, and emitting a thin sanious fluid. Prescribed chlorate potassa internally and lead lotion to arm.

Drs. Roberts and Townsend saw the case in consultation on the 10th. Their description of his condition on that day did not differ from the one given by Dr. Tompkins, of his symptoms on the 9th, except in the general progress towards virulence and malignancy.

On the 11th and 12th there seemed great tendency towards congestion in the mornings, marked by coldness of extremities, a leaden pallor of surface, and feebleness of pulse. This condition was followed in about four hours with febrile reaction, but without increase of frequency of pulse, which has been tolerably uniform at 98 per minute; has been freely purged. Commenced taking calomel and opium on the 10th, which was continued at intervals until 12 o'clock M. on the 12th. Nitrate of silver was applied to wound, over and around tumors and gangrenous spots, and heavy caustic lines drawn around arm in front of axilla.

When seen by me at 6 o'clock P.M. on the 12th ult., pulse 71, large, bounding, and intermittent; skin moderately hot, and

occasional free perspirations; tongue dry, and considerably coated; great hebetude of intellect (this, I afterwards thought, was to some extent due to a pretty full dose of morphine taken in the early part of day, as when I left him next morning his mind was clear). Has hiccoughs, some nausea, thirst, loathing of food, and extreme jactitation. Left arm somewhat swollen and red. The original wound at point of inoculation about an inch in diameter, circular, in a sloughy condition, and discharging a thin, dirty-looking serum. On other portions of the limb there were spots of different sizes and stages of development, from some of which the cuticle had been denuded, leaving a dark, almost black appearance, from which a dark-reddish fluid exuded. One of these gangrenous tubercles was situated midway and on back of left forearm, about three inches in length and one and a half inches in width, from which the cuticle had slipped off as from a burn, leaving a dark gangrenous mass underneath, which was discharging a thin, dark-red sanies. On the right arm, over the olecranon process, there was observed on yesterday a small, hard, red spot, which is now about three or four inches in diameter, and circular, the cuticle over which presents the appearance of a blistered surface, and the skin underneath (which can be seen where the cuticle has been torn in a small place) of a dark, livid color. These tumors or tubercles, when they are first observed, are only red spots upon the skin, which is somewhat elevated, with a hardened base. Within 36 or 48 hours they assume the appearance of regular bullæ, the cuticle looking as if it had been scalded, beneath which a thin fluid collects into a vesicle embracing the extent of the hardened base, easily broken or destroyed, and revealing the sphacelated tissues underneath, varying in appearance from a livid color to that characterizing complete gangrene, according to their duration—the latter generally occurring within 48 hours after first appearance. One of these hardened tumors, which was pointed out to me, located near the elbow of the left arm, seemed to have resulted in the formation of a small abscess, which had discharged 36 hours after the discoloration and elevation in the skin had been first observed. The discharge from this point was described as "considerable," and consisting of a bloody fluid mixed with quantities of matter having somewhat the characteristics of genuine pus. The tissues around this particular spot were the only ones which did not present either a sphacelus, or a decided tendency towards gangrene, in all places where the cuticle had been broken.

On different portions of the arm and forearm there are scat-

tered three or four pustules, resembling fully-matured small-pox vesicles, but larger and more pointed. One of these pustules was also found on the breast, and another on one of the legs of the patient. The prescription, which was the result of one consultation, was the avoidance of all exhausting remedies and the free use of sustaining measures, such as animal broths, milk, rich wines, brandy, etc., together with the internal use of chlorate of potassa with hydrochloric acid and some preparation of iron. Prognosis unfavorable.

I left a request that the physicians in attendance would furnish me notes on the subsequent progress of the case, which was very promptly complied with by Dr. Roberts. These being full, embrace a considerable space, and I do not deem it important to read them here, further than to give a general synopsis of them.

The march of the disease was characterized by pretty much the same symptoms enumerated in the above report, giving at no time any indication of amelioration, but, on the contrary, marked by a progressive increase in violence. Patient became quite delirious on the night of the 13th, which continued in a greater or less degree, with low muttering and coma towards the close. Involuntary discharges of urine came on. Hiccough, with dryness and redness of the tongue and mouth, and excessive thirst, were present throughout. Old abscesses and gangrenous spots enlarged and sloughed. Four abscesses formed, and pustules scattered over the limbs, body, and face, varying in size from that of a pea to a hazlenut. Eyes became swollen, with a livid discoloration surrounding them, with an unusual trembling of lower jaw. Jactitation, which had been excessive throughout the attack, continued, with subsultus tendinum, until the patient expired, on the morning of the 19th, about fifteen days after the beginning of the attack. No autopsy was made. The limb, which was much swollen at first, became greatly reduced in size.

The transmissibility of disease from the equine tribes of animals to the human subject, though once questioned, has been demonstrated beyond the possibility of a doubt. I have not been able to find any records touching the subject of glanders in man, going farther back than the present century, and it may, therefore, be said to be comparatively a new disease upon our calendar; and it is more in consequence of the novelty of the disease itself, than from any special points of interest possessed by this particular case, that I have been induced to read you the above notes. This is the first case of glanders in the

human subject I ever saw, and I have never before heard of a case in this State. The first case on record, which I have seen noticed, was that reported by Muscroft, of Edinburgh, in 1821, and the second reported by Dr. Rimu, of Germany, in 1832. To Dr. Elliotson, however, is due the credit of having done more, in the investigation of the subject, than perhaps any other man.

In order to indicate something of its nature, as well as to define its origin, the latter gentleman has applied to the disease in the human subject the term *equinia*, which has been adopted and qualified by other authors, so as to include another affection also communicated from the horse to the human subject. This is characterized by a pustular eruption, and occasionally communicated to coachmen and stable-boys who tend and dress the heels of horses affected by the disease peculiar to that animal, and known as *grease*. To the latter the term *equinia mites* has been applied; whilst to the one emanating from the glandered horse the term *equinia glandulosa* has been assigned.

According to Dr. Elliotson, equinia glandulosa may appear in the human subject in different forms:—1. In that of simple acute glanders; the disease attacking the nasal cavities and adjoining parts. 2. In that of acute *farcy glanders*, appearing in various parts, in the form of small tumors, which suppurate and give rise to foul ulcers. 3. Where varieties may exist separately, or they may be both produced at the same time, or the one may precede the other. 4. Each of these varieties may also occur in a chronic form; they may also exist separately, or be conjoined. Besides these divisions of the disease, other subdivisions have been made. Thus, Rayer distinguishes in the acute form an ecchymotic, a gangrenous, and a pustular variety —all agreeing, however, that these different varieties constitute one and the same disease, and are produced by the same specific cause, and may all occur in the same case.

In the case here detailed it will be observed that a set of symptoms, which is, perhaps, the most characteristic of all those which usually attend glanders of the human subject, was entirely absent. I allude, of course, to those affecting the pituitary membrane. In many particulars there was a close resemblance between the symptoms in this case and those which attend severe and aggravated cases of haimatoxic poisoning from dissecting wounds; and, in the absence of the specific contagion to which it was known the patient had been exposed, it might very properly have been classed under that head.

In speaking of the diagnosis, Dr. Gross says:—"From the

effects of a dissection wound, it may be readily distinguished by the peculiar discharges from the nose and by the character of the cutaneous eruption. The history of the case, too, will furnish important diagnostic data, and should, therefore, always receive due consideration. The fact that the patient has nursed or examined a glandered horse or person will, generally of itself, afford strong presumptive proof of the true character of the attack." The nasal discharge, as is said to have been the case in more than two-thirds of all the cases on record, was in this instance entirely wanting, whilst the character of the cutaneous eruptions did not differ materially from such as are often opened in dissecting wounds; so that the only means of diagnosis left us in some cases, and, particularly, as between some cases of dissection wounds and farcy glanders, is in relation with our knowledge of the cause and circumstances of the attack. The original wound at the point of inoculation, with its red streaks running to the axilla, the general erysipelatous appearance of the limb, the vesicles or bullæ appearing over the red, hardened tumors on different portions of the limb and body, with thin, sub-cuticular, gangrenous sloughs, together with the pustules and abscesses, first appearing on the diseased limb and finally extending to every portion of the body, create an assemblage of spmptoms so closely resembling each other in the two diseases, that I must confess I should hesitate to decide from this data alone upon the diagnosis. The constitutional symptoms also are scarcely less similar than those of the surface; and the general progress of the two diseases is marked by pretty much the same phenomena—except that in one the disease is generally fatal, whilst in the other the reverse is the rule. So that at last our only positive means of diagnosis, added to the symptoms common to both, is our knowledge as to whether or not the patient has been exposed to the contagion in the one instance, or the producing cause in the other.

I have not intended to read you an essay on glanders, but simply to give you the facts, circumstances, and symptoms attending what seemed to me to be a very rare and interesting case of disease. I have done this with the more pleasure because I know that some members of the profession, and, perhaps, some members of this Society, do not believe in the existence of such a disease as glanders in the human subject. I feel entirely satisfied that this was the specific disease known as glanders, reproduced in the human subject, through inoculation from the horse. One of the features of the disease, which is the most characteristic where it does occur, was not present, it is true

(I allude, of course, to the nasal symptoms), but yet it is shown that this has been the case with a large majority of the cases which have been recorded, and that its existence is by no means necessary in order to constitute a case of glanders. Some authors have contended that glanders and farcy are two separate and distinct diseases, whilst the weight of evidence is strongly in favor of their identity. This latter view gains confirmation from this case, from the fact that it was communicated from an animal in which the prominent features of the disease were those claimed for glanders; whilst it reproduced in the human subject inoculated from it only those phenomena common to farcy.

NOTE.—This paper, contributed by Dr. W. O. Baldwin, the present President of the American Medical Association will, it is hoped, suggest inquiry and stimulate investigation, in regard to this interesting subject. All information communicated will be published with pleasure.—ED.—*Richmond and Louisville Medical Journal.*

ON THE NATURE OF THE WAXY, LARDACEOUS, OR AMYLOID DEPOSIT.

BY WILLIAM H. DICKINSON, M.D., etc.

The author has had the opportunity of observing 60 cases of waxy or amyloid degeneration of the solid organs, and has found that in 46 of these cases there was a well-attested history of suppuration, and that in 4 others suppuration had probably preceded the outbreak of the disease. Comparing this result with those shown by the cases collected by Dr. Wilks (*Guy's Hospital Reports*, 1856 and 1862) and by Dr. Stewart (*Edinburgh Monthly*, 1861 and 1864, and *Brit. and For. Med.-Chir. Rev.*, 1866), he finds that of 104 cases, suppuration had existed in 83; and the fact that these two gentlemen collected their cases without reference to antecedent suppuration, makes these figures more valuable.

In speaking of the test for this kind of degeneration, iodine and sulphuric acid, he says that he has never been able to produce the blue tint spoken of by Virchow, but that a reddish-brown color followed their application to the diseased tissue, instead of the yellow color which is obtained normally. He has found, moreover, that we possess in the sulphate of indigo as good a test as iodine; the healthy liver, when soaked in a weak solution of this salt, becomes of a blue color, which

changes rapidly to green, but a waxy liver so treated retains the color. The colors obtained by iodine and sulphate of indigo are not destroyed if the affected tissue be soaked in alcohol, acids, or aqua ammoniæ, but fade when it is treated with a solution of caustic soda or potassa; and a waxy liver first treated with a solution of either of these alkalies, fails to respond to either test. Dr. Dickinson naturally infers from this, that there is a deficiency of these substances in the organs which have undergone this form of degeneration, and this inference he proves to be correct by a comparison of the analysis of a healthy liver with that of a waxy liver; in the latter soda and potassa are found to be decidedly diminished in quantity, and this deficiency he explains by the suppuration. Pus, as is well known, contains both these substances in larger proportion than the blood; hence, a drain of this kind cannot long continue without the occurrence of the result above indicated. He thinks that the deposit in the organs consists essentially of dealkalized fibrin, and says that if fibrin be treated with dilute hydrochloric acid, and then the solution evaporated to dryness, a substance will be obtained which reacts with iodine precisely as the amyloid liver. He proposes to apply the term "Depurative" to the disease, as significant of the process which is its most frequent cause. The objection to the word is, as he himself says, its frequent use in another sense.

The practical deduction to be drawn from this paper is, that the exhibition of alkalies is imperatively called for, not merely during the course of the disease, but also in all surgical affections which are accompanied at any stage by profuse suppuration.—*Med.-Chir. Transactions.—Boston Med. and Surg. Jour.*

The Rights of Medical Experts as Witnesses.—In the Police Court of Sacramento, during the trial of a case of alleged crime, a medical witness, Dr. Simmons, was called on by the defence to testify as to his knowledge of the facts of the case, which he did accordingly. His opinion was then demanded, as an expert, with regard to the mental condition of the defendant at the time of the alleged crime. The doctor answered very properly, that he had already declared all he knew in the case, but would decline giving an opinion as an expert until he was paid an honorable fee. The Court overruled the objection, and required his opinion, which he still declined to give; whereupon he was placed nominally under arrest for contempt, for the purpose of having the question settled by a higher court. It is desirable that physicians everywhere take

the same course. It is enough for them to spend their time hanging about court-rooms from day to day as ordinary witnesses. This they will do as good citizens, great as the sacrifice often is. Beyond this, their professional knowledge, which forms their capital in business, is personal property; and courts have no more right to it than to their professional services in other directions, or to the professional services of lawyers, or the manual skill of mechanics. It is not to be inferred that physicians are wanting in liberality when they take this ground, or that the value of the fee is the main purpose. The question is one of principle, and may almost be put in this form: As physicians already spend three-fourths of their time in waiting on the poor and serving the public, without pay, has not this same generous public, through the courts, a legitimate claim on the remaining fraction of their time and services? That "one good turn deserves another," is not, we believe, a maxim of law, in its sinister sense, or in any sense. And yet the impression seems to prevail, that because the services of medical men can always be had, on call, for the poor, or in emergencies, without consideration of pay, therefore they have no reasonable claim for compensation under any circumstances, and should accept every dollar vouchsafed to them for their services with humility and thanksgiving. Justice to themselves and to each other, and regard for the younger members of the fraternity, require that this idea of the unmixed and unqualified philanthropy of the profession should be narrowed down in some degree—enough, at least, to let in dollars and cents for bread. We have little fear of an adverse decision in the case of Dr. Simmons. A similar case was lately decided in Chicago in favor of the physician. The habits and interests of lawyers would naturally lead them to a correct view of the question in the abstract. And it is only when he finds himself bound by his position to take a different view, or when he feels proud of his skill in carrying a wrong point, that a lawyer would be likely to oppose the claim of a medical expert for compensation.—*Pacific Medical and Surgical Journal.*

Effects of Traumatic Lesions of Nerves.—In our last No., p. 110, we gave a brief notice of a memoir on this subject by M. Paulet. We have since received the following fuller report of the results of the investigations of M. Paulet, which we now transfer to our pages:—

M. Paulet recently read, at the Paris Surgical Society, a highly interesting memoir on the Effects of Traumatic Lesions

of Nerves, in which he arrived at some remarkable conclusions. Examining in detail the results derived from experimental physiology, as reported during the last half century, he finds the general conclusion is, that a divided nerve is capable of true regeneration, and that such regeneration is a *sine qua non* of a restoration of the function lost by the division of the nerve. Next, the period of time requisite for this regeneration may occupy one or many months, according to the amount of loss of substance, or the degree of separation between the divided ends, while, when the loss of substance exceeds a certain limit, restoration will never be accomplished. But when he comes to examine recorded facts derived from clinical experience, he finds that they lead to very different conclusions to those deduced from experiment. The facts he has collected show that the reëstablishment of function takes place long prior to the periods fixed by the physiologists, and that both sensibility and motion have been reëstablished, although the loss of substance in the trunk of the nerve has never been repaired. He divides his cases into two categories—those in which there has been simple neurotomy, and those in which this has also been accompanied by excision. Of the ten examples of the first which he has collected, he finds that in four the nervous influence was restored before the possibility of the production of a cicatrix permeable to the nervous influence, while in three instances the continued separation of the extremities of the nerves was demonstrated by preparations. Among the eighteen cases of neurotomy with excision that he has collected, in some the functions were very soon reëstablished, while in others, in which this required a much longer time, so much of the nerve had been removed as to exclude all idea of its reproduction. In some cases excision of an important nerve in nowise disturbed sensation or voluntary motion. M. Paulet passes in review the various explanations that have been given of the return of nervous function, without finding any of them satisfactory, and he has instituted experiments on animals without obtaining any elucidation; nor does he believe that it is in this direction that the explanation will be found, clinical observation carefully conducted being really what is required.—*Med. Times and Gaz.*, April 4, 1868.

On the Endoscope.—The most important revelation of the endoscope is the complete establishment of the fact that the mucous membrane of the urethra, like that of the eye, is subject to a *granular* inflammation, and that this disease constitutes the true lesion in many chronic gonorrhœas. Some years ago

experiments were made upon women hired for the purpose, which showed that granular ophthalmia might be inoculated into the urethra, and there produce a disease which could not be distinguished from chronic gonorrhœa.

In fact, true chronic gonorrhœa is a *granular* inflammation, identical in nature with that which produces granular inflammation of the eyelids, of the cervix uteri, and of the larynx; and one may be produced from the other by inoculation.

When *granular*, or true chronic gonorrhœa, exists, it has no tendency to spontaneous recovery, but will last an indefinite number of years, unless properly treated, and will communicate contagion as long as it continues. This disease often persists long after the patient believes himself or herself free from the clap, and hence the frequency with which men contract gonorrhœa from females whom they believe, and who believe themselves, to be free from the disease. The chief use of the endoscope is in the diagnosis and treatment of this disease. Granular inflammation of the urethra, like that of the eyelids and cervix uteri, is extremely slow and obstinate, sometimes requiring several months, or even a year or more, to effect a cure. As long as the endoscope shows any granulations, the disease and its contagiousness continue. During all this time the discharge may be scarcely worthy of notice, and not at all purulent, but a slight irritation serves to arouse the granulations into activity, so that the patient, without being subjected to any new contagion, may have all the symptoms of a new attack of acute gonorrhœa. Chronic or granular urethritis may also be communicated in the quiescent, or more latent form, without the patient ever passing through the symptoms of ordinary manifest clap. Hence many persons will give gonorrhœa to others, who are utterly unaware that they have had the disease themselves. In the French and Prussian official examinations, the quiescent form of the disease has until lately escaped notice; for granulations were not looked for, nor appreciated, but only the more noticeable phenomena of ordinary gonorrhœa and syphilis. Hence the license system for a long time proved very inefficient in restraining the spread of gonorrhœa.

The tendency of the granular disease is also gradually to infiltrate the mucous membrane with permanently organized plastic lymph, and thus lead to stricture. Hence the vulgar opinion that stricture is generally due either to the acuteness of the first inflammation, or to the injudicious use of nitrate of silver and other injections, must be considered erroneous. Granular urethritis tends towards stricture in all cases, though the

narrowing is not always so great as to trouble the patient's urination.—*N. Y. Medical Gazette.*

Carter's Bridge, Va., 1868.

Apparent Exercise of Volition during Anæsthesia Complete in all Other Respects.—Called, March 3d, 1868, to M——, æt. 10 years; female, nervous temperament fully marked; suffering with odontalgia; was very unwilling to allow extraction of the diseased tooth, and closed the jaws so strenuously as to successfully resist every effort to part them. At the solicitation of the parents, I subjected her to the influence of chloroform, during the administration of which, she had to be forcibly held upon the couch, so great was her repugnance to extraction, even when assured it would be painless. I repeated my efforts to separate the jaws, while anæsthesia was yet imperfect, but opposing volition was still exercised and baffled the attempts. During this period she opened the mouth and permitted an examination of the tooth, under the assurance that I would not attempt its extraction. When every other evidence of full and complete anæsthesia was present, I still found the jaws so strongly held together as to necessitate leverage in opening the mouth for the admission of the extracting forceps. The resistance was not such as we find in tonic spasm, but appeared to be the result of voluntary effort, and never yielded, though the anæsthetic was used until the condition of the pupils and pulse forbade its further employment. There was not the least sign of any spasm or rigidity of any other muscles of the system; but, on the contrary, the usual relaxation.

W. H. Shepherd, M.D.

—*Richmond and Louisville Medical Journal.*

Sulphurous Acid in the Treatment of Pyrosis is strongly recommended by Dr. Lawson. *In every instance, he asserts, in which it has been employed, it has, in a very short time, completely arrested the water-brash secretion.* It checks the excessive secretion, stops the vomiting, and lessens the epigastric dragging pain so often complained of. Dr. L. considers, provisionally, that its good effects are due to the production of ozone and the destruction of vegetable germs.

The doses of the acid (B. P.) vary from *m*xxx to ʒj three times a day, shortly before meals. Bitter infusions may be employed as a vehicle, but plain distilled water is best.—*The Practitioner*, September, 1868.

The Clinique.

CLINICAL REPORT FROM MEDICAL WARDS OF MERCY HOSPITAL.

Service of N. S. DAVIS, M.D., Professor of Clinical Medicine, etc. Reported by W. A. Barstow.

Gentlemen:—This young man, occupying the bed before you, has an affection of the glands of the groin. At first, it would seem as though it were due to inoculation with a specific poison. This is not the case, however, as the patient has not had any form of syphilitic disease, at least for several years. The enlargement of the glands has come on gradually, affording him little pain, except when attempting to walk. There are evidently several glands enlarged on left side, and some on opposite side.

These glands are apt to enlarge when the patient has been exposed to cold or wet. When due to this cause, the inflammation usually develops suddenly, and subsides in two or three days, without treatment. In other instances, they arise from a sore on the foot, an ingrowing toe-nail, or perhaps some sore midway between the ankle and knee; the tenderness, in such cases, extending along the course of the lymphatics to the groin. The most frequent cause, however, of this form is from a sore on the foot. Without these conditions, we will find patients who are pale, cachectic, blood-impoverished, tissues not well nourished, with indications of diseased lymphatic glands in more than one situation: sometimes in the neck, extending down to the clavicle; sometimes extending down along the larger bronchial tubes, creating great distress, cough, and wheezing.

I once had a lady under my care whose bronchial glands were so enlarged that she could endure but little exercise. If she went up-stairs quickly, it would cause her to wheeze terribly.

Sometimes we meet with chronic enlargements in the groin,

along the edge of the pelvis; and I have no doubt but what these sometimes extend into the abdomen.

When associated with a scrofulous or tuberculous diathesis, the prognosis is uncertain, and the treatment often protracted. I think this patient is inclined to the above diathesis, as the pallor, thin flesh, and rather narrow chest, would indicate. He is easily made sick at the stomach. Bowels inclined to be constipated. If you examine the tumor in the left groin, you find it oblong, parallel with Poupart's ligament, and made up of a chain of enlarged and indurated glands. They are but little sensitive, and uniformly hard, except a small soft place on the most prominent one to the left, which feels like a small spot of suppuration.

Locally, we will keep the enlarged glands covered with a linseed poultice, wet up with an infusion of aconite leaves. To improve the general health, and render the digestive and assimilative functions more active, and thereby aid in causing resolution in the enlarged glands, we will give him ten drops of the following solution, before each meal, in a wineglassful of water:—

℞. Iodine, ---------- 10 grs.
Iodide Potassæ, ---------- ℥j.
Water, ---------- ℥j.

Also one of the following pills at bedtime each night:—

℞. Ext. Hyoscyamus, ---------- 30 grs.
Sulph. Ferri, ---------- 30 grs.
Pulv. Aloes, ---------- 30 grs.
Blue Mass, ---------- 15 grs.
Ext. Nux Vom., ---------- 15 grs.

Mix. Divide 30 pills.

It may be that the soft point in the left groin will require opening. But will defer it until it is farther advanced, and it may be found to recede without any external discharge.

The attention of the Class was directed briefly to the progress of two other cases of disease in the same ward.

Note.—The foregoing treatment was continued ten days, during which the enlarged glands nearly disappeared, and the general health of the patient was much improved.

Book Notices.

A Manual of the Dissection of the Human Body. By Luther Holden, F.R.C.S., Assistant Surgeon of, and Lecturer on Anatomy at, St. Bartholomew's Hospital, London. With Notes and Additions. By Erskine Mason, M.D., Demonstrator of Anatomy at the College of Physicians and Surgeons, and Surgeon to the Charity Hospital, New York. Illustrated with numerous Wood Engravings. New York: Robert M. De Witt, No. 13 Frankfort Street. 1868. Pp. 588.

This is a new and enlarged edition of the well-known Holden's Dissector. It is published in excellent style, on good type and paper, with excellent illustrations. The additions made by the American Editor are numerous and valuable. It is one of the most convenient and accurate guides to the study of practical anatomy that we have seen.

A Treatise on the Principles and Practice of Medicine: Designed for the Use of Practitioners and Students of Medicine. By Austin Flint, M.D., Professor of the Principles and Practice of Medicine in the Bellevue Hospital Medical College, Fellow of the New York Academy of Medicine, etc. Third Edition, thoroughly revised. Philadelphia: Henry C. Lea. 1868.

Dr. Flint's Treatise has now been before the public nearly three years, and the rapid exhaustion of the two first editions shows that its merits have been appreciated. The present edition contains evidence of having been carefully revised by the author, and presents the present state of practical medicine in as interesting and concise a form as is possible. The work is substantially bound, and contains 1002 closely-printed pages. For sale by S. C. Griggs & Co., Chicago. Price, $7.00.

Outlines of Physiology, Human and Comparative. By John Marshall, F.R.S., Professor of Surgery in University Col-

lege, London; Surgeon to the University College Hospital. With Additions. By FRANCIS G. SMITH, M.D., Professor of the Institutes of Medicine in the University of Pennsylvania. Illustrated by numerous Woodcuts. Philadelphia: Henry C. Lea. 1868.

The author of this work has aimed to condense within the limits of a convenient text-book a complete summary of the present state of knowledge on the subject of both human and comparative physiology. In this he has succeeded well. The additions by the American Editor are numerous, and increase the value of the work. It will be found one of the most convenient and useful works on physiology that we possess. The work is substantially bound, and contains over 1000 pages. For sale by W. B. Keen & Co., Chicago.

The Medical Formulary: Being a Collection of Prescriptions derived from the Writings and Practice of many of the most eminent Physicians in America and Europe; together with the usual Dietetic Preparations and Antidotes for Poisons. To which is added an Appendix, on the Endermic Use of Medicines, and on the Use of Ether and Chloroform. The whole accompanied with a few brief Pharmaceutical and Medical Observations. By BENJ. ELLIS, M.D., late Professor of Materia Medica and Pharmacy in the Philadelphia College of Pharmacy. Twelfth Edition, carefully revised and much improved. By ALBERT H. SMITH, M.D., Fellow of the College of Physicians of Philadelphia; Lecturer on Obstetrics to the Philadelphia Lying-in Charity, etc., etc. Philadelphia: Henry C. Lea. 1868. Price, $3.00.

This is a neatly-bound octavo volume of 374 pages. Its contents are well indicated by the title-page. The most ardent admirer of formulæ will find here an abundance of samples for study.

Atlas of Venereal Diseases. By A. CULLERIER, Surgeon to the Hospital Du Midi; Member of the Surgical Society of Paris, etc., etc. Translated from the French, with Notes

and Additions. By FREEMAN J. BUMSTEAD, M.D., Professor of Venereal Diseases in the College of Physicians and Surgeons, New York, etc. Philadelphia: Henry C. Lea. 1868. Part 5.

The fifth, and last, part of this valuable work has been received, and completes the volume. It is accompanied by a copious index, title-page, etc., and also a neat and substantial binding. This part is occupied chiefly with the consideration of Secondary and Tertiary Syphilis. The plates are executed in the best style; and the whole work does much credit to both authors and publishers. For sale by W. B. Keen & Co., 148 Lake Street, Chicago.

Doctor or Doctress? By SAMUEL GREGORY, A.M., M.D., Secretary of the New England Female Medical College.

We have received a little pamphlet with this title, advocating the use of the word *Doctress* to designate female physicians. We approve the plan. Let the female physician have a *feminine* title, by all means.

Editorial.

APOLOGY.—The *St. Louis Medical and Surgical Journal* calls our attention to the fact, that the October number of the EXAMINER contained among its *selected* articles three that were copied from that Journal without the usual credit. Having a good proof-reader in the office, we do not require the proof-sheets of selected articles to be submitted to us for examination before they are worked off. The articles copied from the *St. Louis Journal* were marked and given to the printer with the expectation that they would be credited according to the standing rule of the office. And we had not noticed the omission until our attention was called to the matter, by a rather sharp rebuke in the latter Journal.

To Subscribers.—This number being the last of the volume, we have directed bills to be sent to all subscribers who are in arrears, stating the amount due up to January 1st, 1869. If any mistakes have been made, we shall be happy to correct them.

In the future, as heretofore, we shall endeavor to make the Examiner worthy of the patronage of the profession.

Chicago Medical College.—The friends of a more methodical and extended system of medical education will be glad to learn that the adoption of a full six months' Lecture term, a complete gradation of Classes, and three courses of Lectures before graduation, by this College, has not prevented it from receiving the patronage of an excellent class of students during the present term. The present arrangement proves highly satisfactory to both Faculty and students.

Detroit Medical College.—We see, by the Announcement of this new medical school, that its first preliminary course of Lectures commenced on the 3d of November; and the first *regular* course is to commence on the 2d of February next, and continue four months.

Every enlightened physician will concede that Detroit is the only proper place for a medical college in the State of Michigan, simply because it is the only one in which adequate facilities for clinical instruction can be found. But we think our friends engaged in the enterprise there, have committed a great mistake in clinging to the old system of pretending to teach the whole field of medicine in *four months*, and disregarding both classification of students and preliminary education. By this course they present no claims on the patronage of the profession superior to the most ordinary schools in the country; and, with the Medical Department of the State University at Ann Arbor on one side, and the Buffalo Medical College on the other, their chances of success are not brilliant. Had they, at the outset, adopted a complete college organization in accordance with the real interests and often expressed wishes of the

profession generally, by making the regular lecture term six months; dividing the branches into series corresponding with the number of years required for study; exacting thorough examinations at the close of each series; with a moderate standard of preliminary education, they would have presented a strong claim on the active sympathy and support of the profession at home and abroad. With this, and the advantage of clinical facilities, they could have competed successfully with their principal rival at Ann Arbor, and ultimately compelled a union, by the removal of the Medical Department of the University to Detroit.

We do not make these remarks from any feeling of unfriendliness towards the Faculty of the Detroit Medical College, for we wish them abundant success in any enterprise that is calculated to promote the educational interests of our profession.

Aitken's Science and Practice of Medicine.—We have just received the second volume of the second American edition of this work.

With the many valuable additions made by the editor, Dr. Clymer, this edition presents, perhaps, the most complete and extensive work on practical medicine now before the profession in our language. The publishers, Lindsay & Blakiston, of Philadelphia, have done their part of the work in excellent style.

For sale by S. C. Griggs & Co., Chicago. Price, $12.00, complete.

Mortality for the Month of October, 1868:—

The Superintendent's monthly report showed a total of 445 deaths, during October, 29 of which were from convulsions, 17 from cholera infantum, 21 from scarlet fever, 14 from dysentery, 12 from diarrhœa, 9 from diptheria, 12 from croup, 34 from typhoid fever, 35 from phthisis pulmonalis, 16 from pneumonia, 10 from whooping cough, 14 from tabes mesenterica, 14 from teething, 10 from old age, and 6 from causes unknown. There were 20 premature births, and 50 still-births.

COMPARISON.

Deaths in Oct., 1868,	445	Deaths in Oct., 1867,	428	Increase,	17
Deaths in Sept., 1868,	739	Decrease,			294

AGES.

Under 1	116	20 to 30	47	70 to 80	16
1 to 3	77	30 to 40	37	80 to 90	5
3 to 5	35	40 to 50	30	Unknown	1
5 to 10	32	50 to 60	11		
10 to 20	23	60 to 70	15	Total	445

Males,	260	Females,	185	Total,	445
Single,	331	Married,	114	Total,	445
White,	443	Colored,	2	Total,	445

NATIVITY.

Foreign Chicago	118	England	8	Sweden	16
Chicago	74	Germany	68	Switzerland	3
Other parts U. S.	75	Holland	2	Unknown	4
Austria,	1	Ireland	51		
Bohemia	7	Norway	5	Total,	445
Canada	6	Scotland	4		
France	2	Italy,	1		

MORTALITY BY WARDS FOR THE MONTH.

Ward.	Mortality.	Pop. in 1868.	One death in	Ward.	Mortality.	Pop. in 1868.	One death in
1	11	11,991	1,091	14	40	14,168	354 1-5
2	15	13,739	916	15	37	20,429	552 1-7
3	15	16,620	1,108	16	16	16,011	1,007
4	18	16,499	916 3-7	Armory,	1		
5	24	13,434	559 7-8	Bridewell,	2		
6	30	12,507	416 8-9	County Jail,	1		
7	62	21,957	353 1-3	County hosp.	13		
8	29	14,003	482 5-6	Chi. River,	3		
9	20	18,050	902 3-5	Mercy Hosp.	1		
10	12	13,644	1,137	Marine Hosp.	1	St. Mary,s Hosp.	1
11	25	13,317	532 3-5	Soldier's Ho.	1	Hosp. for Women and Children,	1
12	27	14,739	549 3-5	Immigrants	15	Home for Friendless,	4
13	20	11,113	555 3-5				

Total, 445

The health of the City during the month of October has been very good, comparing favorably with the corresponding month in 1867, when the increase of population is borne in mind. There is a marked diminuition in the infantile mortality, with a decided increase of deaths by scarlet and typhoid fevers. In no other respect is there anything unusual. The influence of the want of drainage is also marked.

The report was adopted and the Board then adjourned.

A Blow to the Fungus Theory of Disease.—In a short communication to the *Centralblatt*, Drs. Bergmann and Schmiedeberg describe a crystalline substance, to which they have applied the name "sulphate of sepine," obtained from putrefying materials, and which they believe represents the proper poison of organic substances undergoing this kind of fermentation. It is obtained by diffusion through parchment-paper, precipitation with corrosive sublimate from an alkaline solution, removal of the mercury of silver, by sulphuretted hydrogen, evaporation and purification of the residue. Large, well-defined, acicular needles are thus obtained, which are deliquescent in the air, and, exposed to heat, melt and carbonize. They possess a powerfully poisonous action. A solution containing scarcely more than one-hundredth of a gramme was injected into the veins of two dogs. Vomiting was immediately induced, and after a short time diarrhœa, which in the course of an hour became bloody. After nine hours the animals were killed, and, on examination, their stomachs and large intestines were found ecchymosed, and the small intestine congested. Frogs could be killed in the same manner.—*Lancet.—N. Y. Med. Gazette.*

Length of the Colon in Young Children.—At a stated meeting of the New York Obstetrical Society, a specimen of hemicephalus, or anencephalus, was presented by Dr. Jacobi. The child weighed nine pounds. The viscera were well developed, and the colon was unusually long in this case. Dr. Smith made the remark, that he had measured the colon in thirty cases of children under six months, and discovered that from one-quarter to one-third of the large intestine lies below the brim of the pelvis. Dr. Jacobi stated that the descending portion of the colon, in the young infant, was nearly twice the length of that of the adult. It crosses over diagonally towards the right side, instead of lying parallel to the long axis of the body. There is no proper sigmoid flexure as in the adult, but, on account of the great length of the colon, a number of flexures are found.—*Amer. Jour. of Obstetrics.—Boston Med. and Surg. Journal.*

Pyrethrum for Scabies.—The *Pacific Med. and Surg. Journal* says:—"Flea powder" is composed of the flowers and leaves of *Pyrethrum Roseum*, and probably of *P. Carnosum*, very finely powdered. It is not commonly fatal to insects, but appears to annoy and stupify them. If the article be recent and properly prepared, it is decidedly efficacious. When scattered in the track of ants, it is said to drive them away with

certainty. A druggist of this city informs us that he keeps his store almost entirely free from flies by dusting it occasionally on the walls and windows, in places where they are accustomed to alight. The insects disappear when they get the powder in contact with their bodies. It is said that when burnt in small quantities, in a chamber affected with mosquitoes, it destroys them or drives them away. A tincture of the plant, made with dilute alcohol, is recommended as a cure for scabies. The application is said to give prompt relief from itching.—*Med. and Surg. Reporter.*

Professors Pancoast and Gross, of Philadelphia, having lately returned from a tour abroad, the occasion was considered a favorable one to show honor to these distinguished men, and accordingly a public reception took place at the Academy of Music, in that city, on Saturday evening, the 24th ult. The greeting of welcome was delivered by Dr. A. Hewson, and was responded to by the two Professors—the addresses of each being eloquent and appropriate. Addresses were also made by Governor Pollock, Daniel Dougherty, Esq., Dr. Sayre of New York, Dr. Doyle, and others. The whole entertainment is represented as excellently arranged and harmoniously carried out, and reflects credit upon all the parties concerned.—*Boston Medical and Surgical Journal.*

Statistics of Spain.—The distinguished statistician, Don Ramon de la Sagra, furnishes the following statistics of Spain during the year 1866:—Total population, 15,800,000. Rate of births, 1 to 26; proportion of sexes, 51·65 boys to 48·35 girls. In every 19 births, one was illegitimate; proportion of marriages, 1 to 112 inhabitants. The average number of children to each marriage, as near as can be estimated, is 4·6. Deaths were 1 to 34 of the whole population, 1 to 28 in the cities; 503 of the deaths out of 1000 were under 6 years of age. —*Medical and Surgical Reporter.*

A fact of some interest, if it be confirmed by further experiments, has recently been announced by the French medical journals. M. Telcphe Desmartis, a medical experimenter of Bordeaux, has succeeded, it is said, in inoculating upon plants tubercular matter taken from the human lung. The result has been the production of a particular kind of mycelium. This leads M. Desmartis to establish a comparison between tubercle and sphacelia, or ergot of rye.—*Lancet.—N. Y. Med. Gazette.*

The Structure of the Tactile Corpuscles Demonstrated.—M. Rouget (*London Med. Mirror*) believes that he has succeeded in demonstrating the structure of the tactile corpuscles; from frequent observations he is warranted in saying that the nerve-fibres actually enter the substance of the cone-like corpuscle instead of being merely coiled round it, as was formerly believed. His specimens are prepared by soaking them for some time in acidulated water, and then acting on them with strong nitric acid, which stains the nerve-fibres, but not the other tissues.—*Medical Record.*

The Qualifications of an Edinburgh Surgeon in 1505.—In 1505, the surgeons of Edinburgh were in noway behind the other schools of the three kingdoms, and we are somewhat surprised to read that "when the surgeons of Edinburgh were, in 1505, incorporated under the denomination of surgeons and barbers, it was required of them to be able to read and write, to know anatomie, nature, and complexion of every parte of the human bodie, and lykeways to know all vayns of the sayme, that he may make *flewbothomie* in due time together with a *perfect knowledge of shaving beards.*"—*Medical Record.*

Mortality of the Abyssinian Expedition.—In the Abyssinian expedition, says the *Deutsche Klinik*, the English troops had 5–8 per cent. of their number sick, and 1–3 per cent. of deaths.

The death-rate among officers was 11 per cent. of the *sick;* among the privates, 18 per cent. in the highlands, and 20 per cent. on the coast and on board the hospital ships. Three medical officers died, and three officers died from violence, one of them a suicide.—*Med. and Surg. Reporter.*

Hemorrhage after Extraction of Teeth.—A correspondent of the *Lancet* writes:—"Troublesome hemorrhage sometimes will follow the extraction of a tooth. A case of this kind occurred a short time ago, in which bleeding continued for six or seven hours, until it was stopped by the following treatment, the effect of which is immediate and permanent, and gives no pain. I have treated five cases in the same manner:—Soften a bit of white wax, and mould it into a conical shape, about an inch long, and press it into the cavity, at first lightly, and then very firmly, so as to fill it. Cover this with a thick pad of lint, to retain it in its place, and bind the jaws together for a few hours with some kind of bandage."—*Med. and Surg. Reporter.*

Prof. Peaslee has resigned the chair of Anatomy and Physiology in the Medical Department of Dartmouth College, occupied by him the past 28 years; and has been transferred to the chair of the Diseases of Women. Dr. Lyman B. How, of Manchester, N. H., has been elected to the vacant chair of Anatomy and Physiology.—*Medical Record.*

Turpentine as an Antidote to Phosphorus.—The *Archives Gen. de Medecine* calls attention to the custom of the workmen in a match factory at Stafford, who apply phosphorus to the matches, of carrying on their breast a tin cup, containing essence of turpentine. This precaution is said to be sufficient to prevent any ill effects from the action of the phosphorus. It was previously known that the vapor of turpentine prevents the ignition and even the phosphorescence of phosphorus, but the practical application of this knoweledge is not so generally adopted as it should be.—*Bost. Med. and Surg. Jour.*

Operation for Hernia without opening the Sac.—In the *New York Medical Record*, Dr. Erskine Mason reports five cases of strangulated hernia, three femoral and two inguinal, which he operated on successfully without opening the peritoneal sac. The method is an old one, but now very generally employed in Great Britain, though not much resorted to in America. Statistics show it to be safer than cutting the sac, which is liable to produce peritoneal inflammation. Dr. Mason thinks it should always be attempted at first, as the sac may be opened afterwards if the hernia cannot be reduced without so doing.

In a late discussion before the British Association for the Advancement of Knowledge, several physicians warmly advocated the opinion that the faculty of articulate language resides in the third frontal convolution of the left side of the brain.

Money Receipts to Nov. 8th.—Drs. Thos. Whitten, $3; J. C. Allaben, 3; L. B. Cowles, 2; David Prince, 5; J. H. Judson, 3; G. W. Morrill 5; J. A. Adrain, 3; J. H. Hollister, 3; Thos. Hamill, 3; H. N. Hurlbut, 3;

Money Receipts from November 7th to 25th.—Drs. A. H. Salisbury, $3; T. T. Ellis, 3; J. B. Eversole, 3; A. B. Hanna, 3; Hill & Carr, 3; D. R. Taylor, 3; David McDill, 3.

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